

Operation Manual

ENGLISH

DVD Map - USA / Canada

CNDV-50MT
CNDV-50MTP

**This operation manual can be used with the following models:
AVIC-N1, AVIC-N2**

Notice to all users:

This software requires that the navigation unit be properly connected to your vehicle's parking brake. If not properly connected and depending on your vehicle, additional installation may be required. For more information, please contact your Authorized Pioneer Electronics retailer or call us at (800)421-1404.

**The screen shown in the example may differ from the actual screen.
The actual screen may be changed without notice for performance and function
improvements.**

Introduction

License Agreement

PIONEER CNDV-50MT [CNDV-50MTP] - for U.S.A.

THIS IS A LEGAL AGREEMENT BETWEEN YOU, AS THE END USER, AND PIONEER ELECTRONICS (USA) INC. ("PIONEER"). PLEASE READ THE TERMS AND CONDITIONS OF THIS AGREEMENT CAREFULLY BEFORE USING THE SOFTWARE INSTALLED ON THE PIONEER PRODUCTS. BY USING THE SOFTWARE INSTALLED ON THE PIONEER PRODUCTS, YOU AGREE TO BE BOUND BY THE TERMS OF THIS AGREEMENT. THE SOFTWARE INCLUDES A DATABASE LICENSED BY THIRD PARTY SUPPLIER(S) ("SUPPLIERS"), AND YOUR USE OF THE DATABASE IS COVERED BY THE SUPPLIERS' SEPARATE TERMS, WHICH ARE ATTACHED TO THIS AGREEMENT (Refer to page 5). IF YOU DO NOT AGREE WITH ALL OF THESE TERMS, PLEASE RETURN THE PIONEER PRODUCTS (INCLUDING THE SOFTWARE, AND ANY WRITTEN MATERIALS) WITHIN FIVE (5) DAYS OF RECEIPT OF THE PRODUCTS, TO THE AUTHORIZED PIONEER DEALER FROM WHICH YOU PURCHASED THEM. USE OF THE SOFTWARE SHALL BE DEEMED TO BE YOUR CONSENT TO THE LICENSE AGREEMENT.

1. GRANT OF LICENSE

Pioneer grants to you a non-transferable, non-exclusive license to use the software installed on the Pioneer products (the "Software") and the related documentation solely for your own personal use or for internal use by your business, only on such Pioneer products. You shall not copy, reverse engineer, translate, port, modify or make derivative works of the Software. You shall not loan, rent, disclose, publish, sell, assign, lease, sublicense, market or otherwise transfer the Software or use it in any manner not expressly authorized by this agreement. You shall not derive or attempt to derive the source code or structure of all or any portion of the Software by reverse engineering, disassem-

bly, decompilation, or any other means. You shall not use the Software to operate a service bureau or for any other use involving the processing of data for other persons or entities.

Pioneer and its licensor(s) shall retain all copyright, trade secret, patent and other proprietary ownership rights in the Software. The Software is copyrighted and may not be copied, even if modified or merged with other products. You shall not alter or remove any copyright notice or proprietary legend contained in or on the Software.

You may transfer all of your license rights in the Software, the related documentation and a copy of this License Agreement to another party, provided that the party reads and agrees to accept the terms and conditions of this License Agreement.

2. DISCLAIMER OF WARRANTY

The Software and related documentation are provided to you "AS IS". PIONEER AND ITS LICENSOR(S) (for the purpose of provisions 2 and 3, Pioneer and its licensor(s) shall be collectively referred to as "Pioneer") MAKES AND YOU RECEIVE NO WARRANTY FOR THE SOFTWARE, WHETHER EXPRESS OR IMPLIED, AND ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE FOR THE SOFTWARE ARE EXPRESSLY EXCLUDED. SOME STATES DO NOT ALLOW EXCLUSION OF IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU. The Software is complex and may contain some nonconformities, defects or errors. For example, the voice recognition function as implemented by the Software may not recognize your voice. Pioneer does not warrant that the Software will meet your needs or expectations, that operation of the Software will be error free or uninterrupted, or that all non-conformities can or will be corrected. Furthermore, Pioneer does not make any representations or warranties regarding the use or results of the use of the Software in terms of its accuracy, reliability or otherwise.

3. LIMITATION OF LIABILITY

IN NO EVENT SHALL PIONEER BE LIABLE FOR ANY DAMAGES, CLAIM OR LOSS INCURRED BY YOU (INCLUDING, WITHOUT LIMITATION, COMPENSATORY, INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES, LOST PROFITS, LOST INCOME, LOST SALES OR BUSINESS, EXPENDITURES, INVESTMENTS, OR COMMITMENTS IN CONNECTION WITH ANY BUSINESS, LOSS OF ANY GOODWILL, OR DAMAGES) RESULTING FROM THE USE OF OR INABILITY TO USE THE SOFTWARE, EVEN IF PIONEER HAS BEEN INFORMED OF, KNEW OF, OR SHOULD HAVE KNOWN OF THE LIKELIHOOD OF SUCH DAMAGES. THIS LIMITATION APPLIES TO ANY AND ALL CAUSES OF ACTION INDIVIDUALLY OR IN THE AGGREGATE, INCLUDING WITHOUT LIMITATION BREACH OF CONTRACT, BREACH OF WARRANTY, NEGLIGENCE, STRICT LIABILITY, MISREPRESENTATION, AND OTHER TORTS. IF PIONEER'S WARRANTY DISCLAIMER OR LIMITATION OF LIABILITY SET FORTH IN THIS AGREEMENT SHALL OR FOR ANY REASON WHATSOEVER BE HELD UNENFORCEABLE OR INAPPLICABLE, YOU AGREE THAT PIONEER'S LIABILITY SHALL NOT EXCEED FIFTY PERCENT (50%) OF THE PRICE PAID BY YOU FOR THE ENCLOSED PIONEER PRODUCT. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty disclaimer and limitation of liability shall not be applicable to the extent that they are prohibited by any applicable federal, state or local law which provides that such a disclaimer or limitation cannot be waived or preempted.

4. EXPORT LAW ASSURANCES

You agree and certify that neither the Software nor any other technical data received from Pioneer, nor the direct product thereof, will be exported outside the United States except as authorized and as permitted by the laws and regulations of the United States. If the Software has been rightfully obtained by you outside of the United States, you agree that you will not re-export the Software nor any other technical data received from Pioneer, nor the direct product thereof, except as permitted by the laws and regulations of the United States and the laws and regulations of the jurisdiction in which you obtained the Software.

5. TERMINATION

This Agreement is effective until terminated. You may terminate it at any time by destroying the Software. The Agreement also will terminate if you do not comply with any terms or conditions of this Agreement. Upon such termination, you agree to destroy the Software.

6. U.S. GOVERNMENT END USERS

If the Software is being acquired by or on behalf of the United States government or any other entity seeking or applying rights similar to those customarily claimed by the United States government, the Data is licensed with "Limited Rights." Utilization of the Software is subject to the restrictions specified in the "Rights in Technical Data" clause at DFARS 252.227-7013, or the equivalent clause for non-defense agencies. Pioneer Electronics (USA) Inc., 2265 East 220th Street, Long Beach, CA 90810.

7. MISCELLANEOUS

This is the entire Agreement between Pioneer and you regarding its subject matter. No change in this Agreement shall be effective unless agreed to in writing by Pioneer. Pioneer retailers do not have the authority to change this Agreement. This Agreement shall be governed by and construed in accordance with the internal laws of the State of California. If any provision of this Agreement is declared invalid or unenforceable, the remaining provisions of this Agreement shall remain in full force and effect.

PIONEER CNDV-50MT [CNDV-50MTP] - for Canada

THIS IS A LEGAL AGREEMENT BETWEEN YOU, AS THE END USER, AND PIONEER ELECTRONICS OF CANADA, INC. ("PIONEER"). PLEASE READ THE TERMS AND CONDITIONS OF THIS AGREEMENT CAREFULLY BEFORE USING THE SOFTWARE INSTALLED ON THE PIONEER PRODUCTS. BY USING THE SOFTWARE INSTALLED ON THE PIONEER PRODUCTS, YOU AGREE TO BE BOUND BY THE TERMS OF THIS AGREEMENT. THE SOFTWARE INCLUDES A DATABASE LICENSED BY THIRD PARTY SUPPLIER(S) ("SUPPLIERS"), AND YOUR USE OF THE DATABASE IS COVERED BY THE SUPPLIERS' SEPARATE TERMS, WHICH ARE ATTACHED TO THIS AGREEMENT (Refer to page 5). IF YOU DO NOT AGREE WITH ALL OF THESE TERMS, PLEASE RETURN THE PIONEER PRODUCTS (INCLUDING THE SOFTWARE, AND ANY WRITTEN MATERIALS) WITHIN FIVE (5) DAYS OF RECEIPT OF THE PRODUCTS, TO THE AUTHORIZED PIONEER DEALER FROM WHICH YOU PURCHASED THEM. USE OF THE SOFTWARE SHALL BE DEEMED TO BE YOUR CONSENT TO THE LICENSE AGREEMENT.

1. GRANT OF LICENSE

Pioneer grants to you a non-transferable, non-exclusive license to use the software installed on the Pioneer products (the "Software") and the related documentation solely for your own personal use or for internal use by your business, only on such Pioneer products.

You shall not copy, reverse engineer, translate, port, modify or make derivative works of the Software. You shall not loan, rent, disclose, publish, sell, assign, lease, sublicense, market or otherwise transfer the Software or use it in any manner not expressly authorized by this agreement. You shall not derive, or attempt to derive, the source code or structure of all or any portion of the Software by reverse engineering, disassembly, decompilation, or any other means. You shall not use the Software to operate a service bureau or for any other use involving the processing of data for other persons or entities.

Pioneer and its licensor(s) shall retain all copyright, trade secret, patent and other proprietary ownership rights in the Software. The Software is

copyrighted and may not be copied, even if modified or merged with other products. You shall not alter or remove any copyright notice or proprietary legend contained in or on the Software. You may transfer all of your license rights in the Software, the related documentation and a copy of this License Agreement to another party, provided that the party reads and agrees to accept the terms and conditions of this License Agreement.

2. DISCLAIMER OF WARRANTY

The Software and related documentation are provided to you "AS IS". PIONEER AND ITS LICENSOR(S) (for the purpose of provisions 2 and 3, Pioneer and its licensor(s) shall be collectively referred to as "Pioneer") MAKES AND YOU RECEIVE NO WARRANTY FOR THE SOFTWARE, WHETHER EXPRESS OR IMPLIED, AND ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE FOR THE SOFTWARE ARE EXPRESSLY EXCLUDED. SOME STATES DO NOT ALLOW EXCLUSION OF IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU. The Software is complex and may contain some nonconformities, defects or errors. For example, the voice recognition function as implemented by the Software may not recognize your voice. Pioneer does not warrant that the Software will meet your needs or expectations, that operation of the Software will be error-free or uninterrupted, or that all non-conformities can or will be corrected. Furthermore, Pioneer does not make any representations or warranties regarding the use or results of the use of the Software in terms of its accuracy, reliability or otherwise.

3. LIMITATION OF LIABILITY

IN NO EVENT SHALL PIONEER BE LIABLE FOR ANY DAMAGES, CLAIM OR LOSS INCURRED BY YOU (INCLUDING, WITHOUT LIMITATION, COMPENSATORY, INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES, LOST PROFITS, LOST INCOME, LOST SALES OR BUSINESS, EXPENDITURES, INVESTMENTS, OR COMMITMENTS IN CONNECTION WITH ANY BUSINESS, LOSS OF ANY GOODWILL, OR DAMAGES) RESULTING FROM THE USE OF OR INABILITY TO USE THE SOFTWARE, EVEN IF PIONEER HAS BEEN INFORMED OF, KNEW OF, OR SHOULD HAVE KNOWN OF THE LIKELIHOOD OF SUCH DAMAGES. THIS LIMITATION APPLIES TO ANY AND ALL CAUSES OF ACTION INDIVIDUALLY OR IN THE AGGREGATE, INCLUDING WITHOUT LIMITATION BREACH OF CONTRACT, BREACH OF WARRANTY, NEGLIGENCE, STRICT LIABILITY, MISREPRESENTATION, AND OTHER TORTS. IF PIONEER'S WARRANTY DISCLAIMER OR LIMITATION OF LIABILITY SET FORTH IN THIS AGREEMENT SHALL OR FOR ANY REASON WHATSOEVER BE HELD UNENFORCEABLE OR INAPPLICABLE, YOU AGREE THAT PIONEER'S LIABILITY SHALL NOT EXCEED FIFTY PERCENT (50%) OF THE PRICE PAID BY YOU FOR THE ENCLOSED PIONEER PRODUCT. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty disclaimer and limitation of liability shall not be applicable to the extent that they are prohibited by any applicable federal, state or local law which provides that such a disclaimer or limitation cannot be waived or preempted.

4. EXPORT LAW ASSURANCES

You agree and certify that neither the Software nor any other technical data received from Pioneer, nor the direct product thereof, will be exported outside Canada except as authorized and as permitted by the laws and regulations of Canada. If the Software has been rightfully obtained by you outside of Canada, you agree that you will not re-export the Software nor any other technical data received from Pioneer, nor the direct product thereof, except as permitted by the laws and regulations of Canada and the laws and regulations of the jurisdiction in which you obtained the Software.

5. TERMINATION

This Agreement is effective until terminated. You may terminate it at any time by destroying the Software. The Agreement also will terminate if you do not comply with any terms or conditions of this Agreement. Upon such termination, you agree to destroy the Software.

6. MISCELLANEOUS

This is the entire Agreement between Pioneer and you regarding its subject matter. No change in this Agreement shall be effective unless agreed to in writing by Pioneer. Pioneer retailers do not have the authority to change this Agreement. This Agreement shall be governed by and construed in accordance with the internal laws of the Province of Ontario and the federal laws of Canada applicable therein. If any provision of this Agreement is declared invalid or unenforceable, the remaining provisions of this Agreement shall remain in full force and effect.

Terms and Conditions for the Tele Atlas Data

THIS IS A LEGAL AGREEMENT (THE "AGREEMENT") BETWEEN YOU, THE END USER, AND TELE ATLAS NORTH AMERICA, INC. ("Tele Atlas"). BY USING YOUR COPY OF THE TELE ATLAS DATA, YOU AGREE TO THE TERMS AND CONDITIONS OF THIS AGREEMENT.

1. Grant of License.

Tele Atlas grants you a non-transferable, non-exclusive license to use the map data and business points of interest information (the "POIs"), (together, the "Data") contained on these discs, solely for personal, non-commercial use and not to operate a service bureau or for any other use involving the processing of data of other persons or entities. You may make one (1) copy of the Data for archival or backup purposes only but you may not otherwise copy, reproduce, modify, make derivative works, derive the structure of or reverse engineer the Data. The Data contains confidential and proprietary information and materials, and may contain trade secrets, so you agree to hold the Data in confidence and in trust and not to disclose the Data or any portions in any form, including by renting, leasing, publishing, leasing, sublicensing or transferring the Data to any third party. You are prohibited from using the POIs (i) to create mailing lists or (ii) for other such similar uses.

2. Ownership.

The Data is copyrighted by Tele Atlas and its licensors and they retain all ownership rights in the Data. You agree not to alter, remove, obliterate, or obscure any copyright notice or proprietary legend contained in or on the Data.

3. Warranty Disclaimer.

THE DATA IS PROVIDED ON AN "AS IS" AND "WITH ALL FAULTS BASIS" AND TELE ATLAS, ITS LICENSORS, AND ITS LICENSED DISTRIBUTORS AND SUPPLIERS (COLLECTIVELY, "SUPPLIERS") EXPRESSLY DISCLAIM ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY, EFFECTIVENESS, COMPLETENESS, ACCURACY, TITLE AND FITNESS FOR A PARTIC-

ULAR PURPOSE. TELE ATLAS, ITS LICENSORS AND SUPPLIERS DO NOT WARRANT THAT THE DATA WILL MEET YOUR REQUIREMENTS OR THAT THE OPERATION OF THE DATA WILL BE UNINTERRUPTED OR ERROR FREE. NO ORAL OR WRITTEN ADVICE GIVEN BY TELE ATLAS, ITS LICENSORS, SUPPLIERS OR ANY OF THEIR RESPECTIVE EMPLOYEES CREATES A WARRANTY OR IN ANY WAY INCREASES TELE ATLAS', ITS LICENSORS OR SUPPLIERS LIABILITY AND YOU MAY NOT RELY ON ANY SUCH INFORMATION OR ADVICE. THIS DISCLAIMER IS AN ESSENTIAL CONDITION OF THIS AGREEMENT AND YOU ACCEPT THE DATA ON THIS BASIS.

4. Limitation of Liability.

IN NO EVENT SHALL TELE ATLAS', ITS LICENSORS' OR SUPPLIER' AGGREGATE LIABILITY FOR ALL MATTERS ARISING OUT OF THE SUBJECT MATTER OF THIS AGREEMENT, WHETHER IN CONTRACT, TORT OR OTHERWISE, EXCEED THE AMOUNT PAID BY YOU FOR YOUR COPY OF THE TELE ATLAS DATA. TELE ATLAS, ITS LICENSORS AND SUPPLIERS SHALL NOT BE LIABLE IN ANY MATTER TO YOU FOR ANY SPECIAL, INDIRECT, CONSEQUENTIAL OR INCIDENTAL DAMAGES (INCLUDING DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, AND THE LIKE) ARISING OUT OF THIS AGREEMENT OR THE USE OF OR INABILITY TO USE THE DATA, EVEN IF TELE ATLAS, ITS LICENSORS OR SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

5. Termination.

This Agreement will terminate immediately and automatically, without notice, if you breach any term of this Agreement. You agree that in the event of termination of the Agreement, you shall return the Data (including all documentation and all copies) to Tele Atlas and its suppliers.

6. Indemnity.

You agree to indemnify, defend and hold Tele Atlas, its Licensors, and its Suppliers (including their respective licensors, suppliers, assignees, subsidiaries, affiliated companies, and the respective officers, directors, employees, shareholders, agents and representatives) free and

harmless from and against any liability, loss, injury (including injuries resulting in death), demand, action, cost, expense, or claim of any kind or character, including but not limited to attorney's fees, arising out of or in connection with any use or possession by you of the Data.

7. U.S. Government Rights.

If you are an agency, department, or other entity of the United States Government, or funded in whole or in part by the United States Government, then use, duplication, reproduction, release, modification, disclosure or transfer of this commercial product and accompanying documentation, is restricted in accordance with FAR 12.212 and DFARS 227.7202, and by a license agreement. Contractor/manufacturer is Tele Atlas North America, Inc., 1605 Adams Drive, Menlo Park, CA 94025, (650) 328-3825. The Data is ©1984-2003 by Tele Atlas N.V. and Tele Atlas North America, Inc. ALL RIGHTS RESERVED. For purpose of any public disclosure provision under any federal, state or local law, it is agreed that the Data is a trade secret and a proprietary commercial product and not subject to disclosure.

8. Additional Provisions with respect to Canadian Data only.

a. Warranty Disclaimer.

The Data may include the data of licensors, including Her Majesty the Queen in Right of Canada. Such Data is provided on an "AS IS" AND "WITH ALL FAULTS BASIS" and the licensors, including HER MAJESTY THE QUEEN AND THE MINISTER OF NATURAL RESOURCES EXPRESSLY DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY, QUALITY, EFFECTIVENESS, COMPLETENESS, ACCURACY, TITLE AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE DATA PRODUCT RESTS WITH YOU. HER MAJESTY THE QUEEN AND THE MINISTER OF NATURAL RESOURCES DO NOT WARRANT THAT THE DATA WILL MEET YOUR REQUIREMENTS OR THAT THE OPERATION OF THE DATA WILL BE UNINTERRUPTED OR ERROR FREE. NO ORAL OR WRITTEN ADVICE GIVEN BY HER MAJ-

ESTY THE QUEEN, THE MINISTER OF NATURAL RESOURCES, TELE ATLAS OR ITS LICENSORS AND EMPLOYEES CREATES A WARRANTY OR IN ANY WAY INCREASES HER MAJESTY THE QUEEN AND THE MINISTER OF NATURAL RESOURCES LIABILITY AND YOU MAY NOT RELY ON ANY SUCH INFORMATION OR ADVICE.

b. Disclaimer of Liability.

IN NO EVENT SHALL THE LICENSORS, INCLUDING HER MAJESTY THE QUEEN IN RIGHT OF CANADA, THE MINISTER OF NATURAL RESOURCES OR THEIR RESPECTIVE OFFICERS, EMPLOYEES OR AGENTS (THE "LICENSORS"), BE LIABLE TO YOU FOR MATTERS ARISING OUT OF THE SUBJECT MATTER OF THE AGREEMENTS, WHETHER IN CONTRACT, TORT OR OTHERWISE.

THE LICENSORS SHALL NOT BE LIABLE TO YOU FOR ANY SPECIAL, INDIRECT, CONSEQUENTIAL, OR INCIDENTAL DAMAGES (INCLUDING DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, AND THE LIKE) ARISING OUT OF THE AGREEMENT OR THE USE OF OR INABILITY TO USE THE DATA, EVEN IF THEY HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

c. Indemnification by You.

You shall indemnify and hold harmless the licensors, including Her Majesty the Queen in Right of Canada, the Minister of Natural Resources and their respective officers, employees and agents, from and against any claim, demand or action, irrespective of the nature of the claim, demand or action alleging loss, costs, damages, expenses, or injury (including injury from death) resulting from your authorized or unauthorized use, possession, modification, or alteration of the Data.

9. Miscellaneous.

This is the exclusive and complete Agreement between Tele Atlas and you regarding its subject matter. Nothing in this Agreement shall create a joint venture, partnership or principal-agent relationship between Tele Atlas and you. The internal laws of California shall govern this Agreement and you consent to the jurisdiction of the Northern District of California or the State of California for the County of Santa Clara. Sections 2 - 4 and 7

- 11 shall survive the expiration or termination of this Agreement. This Agreement may be amended, altered, or modified only by Tele Atlas. You may not assign any part of this Agreement without Tele Atlas' prior written consent. You acknowledge and understand that the Data may be subject to restrictions on exportation and agree to comply with any applicable export laws. In the event that any provision or part of a provision of this Agreement is determined to be invalid, illegal, or unenforceable, such provision or part thereof shall be stricken from this Agreement and the remainder of this Agreement shall be valid, legal, and enforceable to the maximum extent possible. Any notice under this Agreement shall be delivered by courier to Tele Atlas North America, Inc., Attention Legal Department, 1605 Adams Drive, Menlo Park, California 94025 USA.

About the Data for the Map Database

- This database was developed and recorded up to January 2004. Changes to streets/highways made after that time may not be reflected in this database.
- It is strictly prohibited to reproduce and use any part or the whole of this map in any form without permission from the copyright owner.
- If the local traffic regulations or conditions deviate from this data, follow the local traffic regulations (such as signs, indications, etc.) and conditions (such as construction, weather, etc.).
- The traffic regulation data used in the map database applies only to standard sized passenger vehicles. Note that regulations for larger vehicles, motorbikes, and other non-standard vehicles are not included in the database.

Copyright

©1984-2004 Tele Atlas North America, Inc. All Rights Reserved.

Data by Info USA ©2004 All Rights Reserved.

Canadian Data © 2004 DMTI Spatial Inc., its licensors, and Tele Atlas North America, Inc. Portions of Canadian map data are reproduced under license from Her Majesty the Queen in Right of Canada with permission from Natural Resource Canada, The Queen in Right of Manitoba, and other third party suppliers.

© 2005 INCREMENT P CORP. ALL RIGHTS RESERVED

Table of Contents

Introduction

- License Agreement **1**
 - PIONEER CNDV-50MT [CNDV-50MTP] - for U.S.A. **1**
 - PIONEER CNDV-50MT [CNDV-50MTP] - for Canada **3**
- Terms and Conditions for the Tele Atlas Data **5**
- About the Data for the Map Database **7**
- Copyright **7**
- Table of Contents **8**
- Important Safety Information **11**
- Notes Before Using the System and Additional Safety Information **12**
 - Failure to Operate **12**
 - After-sales service for Pioneer products **12**
 - Purchasing Software Upgrade **12**
 - Product registration **12**
 - Precaution **12**
- Features (Characteristics of this software) **14**
- Manual Overview **15**
 - To users upgrading the application program **15**
 - How to use this manual **15**
 - Terminology **16**
- Map Discs for Navigation System **17**
 - Configuration of data recorded on discs **17**

Chapter 1

Basic Operation

- Flow from Startup to Termination **19**
- Basic Navigation **20**
 - Memory navi mode **24**
 - How to listen to a CD **24**
 - Buttons you can use **26**

Chapter 2

Menu and Map Display

- How to Use Menu Screens **27**
 - Main menu **27**
 - Shortcut menu **28**
- How to Use the Map **29**
 - Switching the current position screen display mode **29**
 - How to view the map of the current location **29**
 - Changing the scale of the map **32**
 - Moving the map to the location you want to see **33**

Chapter 3

Setting a Route to Your Destination

- Finding Your Destination by Selecting the Type of Facility **35**
 - Searching for Points of Interest (POI) **35**
 - Finding a POI in your surroundings **36**
 - Searching the facilities around the scroll cursor **37**
 - Displaying certain POI on the map **37**
- Setting an Entrance or Exit of a Freeway as Your Destination **37**
- Searching for Your Destination by Specifying the Telephone Number **38**
- Route Calculation to Your Home Location or to Your Favorite Location **38**
- Selecting Destination from the Destination History and Address Book **38**
- Modifying the Route Calculation Conditions **38**
 - Items that users can change **39**
 - Perform the route calculation of the several route options, and select one **39**
- Checking the Set Route **40**
 - Checking the set route with the map **40**
 - Checking the set route with text **41**
 - Checking the set route from the Route Options menu **41**
- Recalculating the Route to Your Destination **42**
- Canceling the Route Guidance **42**
- Adding Way Points to the Current Route **42**
 - Adding a way point **42**
 - Skipping a way point **43**
 - Deleting a way point from the route **43**
 - Adding and deleting way points using the Route Options **44**
 - Registering POI shortcuts **44**

Chapter 4

Editing the Navigation Utilities

- Editing Registered Locations **45**
 - Registering your home and your favorite location **45**
 - Registering a previous location in the Address Book **46**
 - Editing a location's information **46**
 - Deleting Address Book or Destination History Information **48**
 - Changing the position of locations registered in the Address Book **48**
 - Loading registered locations data from a CD-R **48**
- Setting Areas to Avoid **49**
 - Registering an area to avoid **49**
 - Changing or deleting an area to avoid **49**
- Using XM NavTraffic Information **50**

- Viewing traffic information **50**
- Information on avoiding traffic congestion on route ahead **51**
- When checking traffic congestion information manually **52**
- Traffic flow information **52**
- Selecting traffic information to display **53**
- Checking the reception status of the XM tuner **54**
- Emergency Info **54**
 - Checking the information registered as Emergency Info **54**
 - Registering user information **55**
 - Locate Car Service **56**
- Using the XM tuner to view stock, sports, and other information **57**
 - Displaying stock prices **57**
 - Displaying browsable information **58**
 - Displaying favorite browsable Information **58**
- Changing Background Picture **59**
- Checking the Navigation Status **60**
 - Checking sensor learning status and driving status **60**
 - Checking the connections of leads and installation positions **61**
 - Setting the Vehicle Dynamics Display **61**

Chapter 5 Customizing Your Navigation System

- Modifying the Default Settings **63**
- Items Users can Change **63**
 - Volume **63**
 - System Options **64**
 - Short-Cut Selection **65**
 - Map Display Options **66**
 - Defined Locations **66**
 - Demo Mode **67**
 - Time **67**
 - Modify Current Location **67**
 - Hardware Info **67**
 - Restore Factory Settings **67**

Chapter 6 Using the AV Source (Built-in DVD Drive and Radio)

- Basic Operation **69**
 - Activating the touch panel keys **69**
 - How to display each menu **69**
- Operating the Built-in DVD drive **71**
 - Touch key operation **72**
 - Operation using the FUNCTION menu **74**
 - Other DVD-Video function **75**
- Radio **77**

- Listening to the radio **77**
- Advanced radio operation **78**
- Storing and recalling broadcast frequencies **78**
- Tuning in strong signals **78**
- Storing the strongest broadcast frequencies **78**

Chapter 7 Using the AV Source (Pioneer AV Equipments)

- Multi-CD Player **79**
 - Listening a CD **79**
 - 50-disc multi-CD player **79**
 - Advanced multi-CD player operation **80**
 - Repeating play **80**
 - Playing tracks in a random order **80**
 - Scanning CDs and tracks **80**
 - Pausing CD playback **80**
 - Using ITS playlists **80**
 - Using CD TEXT functions **81**
 - Using compression and bass emphasis **82**
- XM Tuner **82**
 - Listening to the XM **82**
 - Switching the XM display **83**
 - Storing and recalling broadcast stations **83**
 - Switching the XM channel select setting **83**
 - Selecting the XM channel directly **83**
 - Display the ID code **84**
- TV Tuner **84**
 - Watching the TV tuner **84**
 - Advanced TV tuner operation **84**
 - Storing and recalling broadcast stations **85**
 - Storing the strongest broadcast stations sequentially **85**
- DVD Player (S-DVD) **85**
 - Playing a disc **85**
 - Selecting a disc **86**
 - Advanced DVD player operation **86**
 - Repeating play **86**
 - Pausing disc playback **86**
 - Playing tracks in a random order **86**
 - Scanning tracks of a CD **86**
 - Using ITS playlists **86**
- External Unit **87**
 - Operating the external unit **87**
 - Operate the external unit by using 1 KEY - 6 KEY **87**
 - Operate the external unit by using FUNCTION 1 - FUNCTION 4 **87**
 - Switching the automatic and manual function **88**

Chapter 8 Customizing the Audio Source Setting

- Audio Adjustments **89**

- Introduction of audio adjustments **89**
- Using the equalizer **89**
- Using balance adjustment **89**
- Adjusting equalizer curves **90**
- Adjusting bass and treble **90**
- Adjusting loudness **91**
- Using subwoofer output **91**
- Using non fading output **91**
- Using the high pass filter **91**
- Adjusting source levels **92**
- Compensating for equalizer curves (EQ-EX) **92**
- Setting Up the DVD Player **92**
 - DVD setup adjustments **92**
 - Setting the language **92**
 - Setting assist subtitles on or off **93**
 - Setting angle icon display **93**
 - Setting the aspect ratio **93**
 - Setting the parental lock **93**
- Initial Settings **94**
 - Adjusting initial settings **94**
 - Switching the auxiliary setting **94**
 - Setting the rear output and subwoofer controller **94**
 - Switching the sound muting/attenuation **95**
 - Switching the automatic disc playback **95**
 - Switching the dimmer setting for sub-display **95**
 - Changing the voice output of the navigation guidance **95**
 - Switching the 5.1ch setting **96**
- Other Functions **96**
 - Setup adjustments **96**
 - Setting the video input **96**
 - Setting for rear view camera **96**
 - Selecting the video of rear display **97**
 - Setting the slide back function **97**
 - Setting the automatic open function **98**
 - Using the AUX source **98**
 - Switching the background display **98**
- Switching the Screen Using the DISP Button **98**
- Language Code Chart for DVD **100**

Chapter 9

Operating Your Navigation System with Voice

- To Ensure Safe Driving **101**
- Basics of Voice Operation **101**
 - Flow of voice operation **101**
- Voice Commands **102**
 - Common commands **102**
 - Commands for display change **102**
 - Available voice commands related to navigation **102**
 - Available voice commands related to audio **103**
- An Example of Voice Operation **103**
- Tips for Voice Operation **104**

Appendix

- Installing the Program **105**
- Memory Navi Mode **107**
 - Navigation in the memory navi mode **107**
 - About the icon for the memory navi mode **108**
 - Major difference between the memory navi mode and the DVD navi mode **108**
 - Cautions relating to auto reroute in memory navi mode **109**
 - TRAFFIC icon during the memory navi mode **109**
 - Operation outside the memorized area **109**
- Positioning Technology **110**
 - Positioning by GPS **110**
 - Positioning by dead reckoning **110**
 - How do GPS and dead reckoning work together? **110**
- Handling Large Errors **111**
 - When the positioning by GPS is impossible **111**
- Vehicles that Cannot Obtain Speed Pulse Data **112**
- Conditions Likely to Cause Noticeable Positioning Errors **112**
- About the Data being Deleted **114**
- Limitation of Functions for Areas not Stored on the Disc **114**
 - Other function limitations **115**
- Troubleshooting **116**
 - Problems in the navigation screen **116**
 - Problems in the audio screen (common) **118**
 - Problems in the audio screen (during DVD-Video playback) **118**
 - Messages and how to react to them **119**
- Error Messages **124**
- Route Setting Information **124**
 - Route search specifications **124**
 - Route highlighting **125**
 - Intersection enlargement **126**
 - Tracking **126**
- Types of the Road Stored in the Disc **126**
 - Roads included in the route guidance and roads not included **126**
 - Non routable roads (pink color road) **126**
 - About folders and MP3 files **127**
- Glossary **127**
- Display Information **130**
 - Main menu **130**
 - Shortcut menu **133**
- Menu in the audio screen **134**
 - AUDIO menu **134**
 - INITIAL menu **135**
 - SET UP menu **135**
 - FUNCTION menu **136**

Important Safety Information

Before using your Navigation System, be sure to read and fully understand the following safety information:

- Read the entire manual before operating this Navigation System.
- The navigation features of this unit (and rear view camera option if purchased) is intended solely as an aid to you in the operation of your vehicle. It is not a substitute for your attentiveness, judgment, and care when driving.
- Do not operate this Navigation System (or the rear view camera option if purchased) if doing so in any way will divert your attention from the safe operation of your vehicle. Always observe safe driving rules and follow all existing traffic regulations. If you experience difficulty in operating the system or reading the display, park your vehicle in a safe location and apply the parking brake before making the necessary adjustments.
- Never allow others to use the system unless they have read and understood the operating instructions.
- Never use this Navigation System to route to hospitals, police stations, or similar facilities in an emergency. Please call 911.
- Route and guidance information displayed by this equipment is for reference purposes only. It may not accurately reflect the latest permissible routes, road conditions, one way streets, road closures, or traffic restrictions.
- Traffic restrictions and advisories currently in force should always take precedence over guidance given by the Navigation System. Always obey current traffic restrictions, even if the Navigation System provides contrary advice.
- Failure to input correct information about the local time may result in the Navigation System providing improper routing and guidance instructions.
- Never set the volume of your Navigation System so high that you cannot hear outside traffic and emergency vehicles.
- To promote safety, certain functions are disabled unless the vehicle is stopped and/or the parking brake is applied.
- The data encoded in the disc is the intellectual property of the provider, and the provider is responsible for such content.
- Keep this manual handy as a reference for operating procedures and safety information.
- Pay close attention to all warnings in this manual and follow the instructions carefully.
- Do not install the display where it may (i) obstruct the driver's vision, (ii) impair the performance of any of the vehicle's operating systems or safety features, including air bags, hazard lamp buttons or (iii) impair the driver's ability to safely operate the vehicle.
- Please remember to wear your seat belt at all times while operating your vehicle. If you are ever in an accident, your injuries can be considerably more severe if your seat belt is not properly buckled.
- Using the most current map DVDs will allow for most accurate destination mapping. Upgrade DVDs are available for purchase through your local Pioneer dealer.
- Never use headphones while driving.

WARNING

- Do not attempt to install or service your navigation system by yourself. Installation or servicing of the navigation system by persons without training and experience in electronic equipment and automotive accessories may be dangerous and could expose you to the risk of electric shock or other hazards.

Notes Before Using the System and Additional Safety Information

Failure to Operate

Should the Navigation System fail to operate properly, contact your dealer or the nearest authorized Pioneer service facility.

After-sales service for Pioneer products

Please contact the dealer or distributor from where you purchased the product for its after-sales service (including warranty conditions) or any other information. In case the necessary information is not available, please contact the companies listed below:

Please do not ship your product to the companies at the addresses listed below for repair without making advance contact.

U.S.A

Pioneer Electronics
(USA) Inc.
CUSTOMER SUPPORT
DIVISION
P.O. Box 1760
Long Beach, CA
90801-1760
800 421-1404

CANADA

Pioneer Electronics of
Canada, Inc.
CUSTOMER
SATISFACTION
DEPARTMENT
300 Allstate Parkway
Markham, Ontario
L3R 0P2
1-877-283-5901

For warranty information, please see the Limited Warranty sheet included with your product.

Purchasing Software Upgrade

Using the most current map DVDs will allow for most accurate destination mapping. Upgrade DVDs are available for purchase through your local Pioneer dealer.

Product registration

Visit us at the following site:


<http://www.pioneerelectronics.com>

1. Register your product. We will keep the details of your purchase on file to help you refer to this information in the event of an insurance claim such as loss or theft.
2. Receive updates on the latest products and technologies.
3. Download owner's manuals, order product catalogues, research new products, and much more.
4. Receive notices of software upgrades and software updates.

Precaution

Parking brake interlock

Certain functions (DVD/TV viewing and certain touch screen keys) offered by this Navigation System could be dangerous and/or unlawful if used while driving. To prevent such functions from being used while the vehicle is in motion, there is an interlock system that senses when the parking brake is set and when the vehicle is moving. If you attempt to use the functions described above while driving, they will become disabled until you stop the vehicle in a safe place, and (1) apply the parking brake, (2) release the parking brake, and then (3) apply the parking brake again. Please keep the brake pedal pushed down before releasing the parking brake.

CAUTION

- **Accuracy/performance of interlock may be impacted by such factors as GPS signal detection, speed pulse wire connectivity, and driving habits or conditions of the place where the vehicle is parked.**
 - **It is strongly suggested that the speed pulse wire be connected for accuracy of navigation and better performance of interlock.**
 - **If the speed pulse wire is unavailable for some reason, it is recommended that the pulse generator (ND-PG1) be used.**
-

To ensure safe driving

When you attempt to watch a DVD or TV while driving, the warning **Viewing of front seat video source while driving is strictly prohibited.** will appear on the screen. To watch a DVD or TV on this display, stop the vehicle in a safe place, and (1) apply the parking brake, (2) release the parking brake, and then (3) apply the parking brake again. Please keep the brake pedal pushed down before releasing the parking brake.

⚠ WARNING

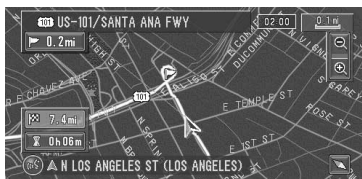
- **To avoid the risk of damage and injury and the potential violation of applicable laws, this unit is not for use with a video screen that is visible to the driver.**
- **In some countries or states the viewing of images on a display inside a vehicle even by persons other than the driver may be illegal. Where such regulations apply, they must be obeyed.**

The Navigation System detects whether your vehicle's parking brake is engaged or not, and prevents you from watching a DVD or TV on this display while driving. If you attempt to use these functions while driving, they may be inoperable. If you need to use these functions, stop the vehicle in a safe place, apply the parking brake, then operate.

⚠ WARNING

- **When applying the parking brake in order to view video source or to enable other functions offered by the Navigation System, park your vehicle in a safe place, and keep the brake pedal pushed down before releasing the parking brake if the vehicle is parked on a hill or otherwise might move when releasing the parking brake.**

Color difference of the map display between day and night



Night display

The examples in this manual are illustrated using the daytime display. When driving at night, the colors you see may differ from those shown. To use this function, the Orange/white lead of this unit must be connected correctly.

➤ "Day/Night Display" → Page 66

⚠ WARNING

- **Do not use with vehicles that do not feature an ACC position.**

Rear View Camera

With an optional rear view camera, you are able to use the Navigation System as an aid to keep an eye on trailers, or backing into a tight parking spot.

⚠ WARNING

- **SCREEN IMAGE MAY APPEAR REVERSED**
- **USE INPUT ONLY FOR REVERSE OR MIRROR IMAGE REAR VIEW CAMERA. OTHER USE MAY RESULT IN INJURY OR DAMAGE.**

About this disc

Only use the Pioneer Map disc with Pioneer DVD Navigation Unit. You cannot use other discs. DVD-Videos and CDs can be played on AVIC-N1 and AVIC-N2. When using AVIC-N1 and AVIC-N2, refer to the "Hardware Manual".

- ❑ DVD video playback on the AVIC-N1 and AVIC-N2 screen is limited to when the vehicle is stopped, and the parking brake is engaged.

Features (Characteristics of this software)

Touch panel key operation

It is possible to operate the navigation function and the Audio function by using touch panel key.

Compatible with the Memory navi mode

Memory navigation functions are provided with the hardware. For details, see page 24, "Memory navi mode."

Compatible with the Voice Recognition System

Using a separately sold Pioneer voice recognition kit (CD-VC1) will enable voice operation for both the navigation and AV functions.

Variety of View Modes

Various types of screen display can be selected for navigation guidance.

– Map View, Driver's View, Route View, Guide View

The split screen mode is also available.

– Rear View mode (Rear view camera screen and Navigation map screen)

You can also display information on vehicle speed, acceleration, and voltage, etc.

– Vehicle Dynamics

CAUTION

- **The rear view mode is for monitoring the rear, for example, when towing a boat. Do not use this function for entertainment purposes.**
-

Wide Variety of Facility Information for POI Search

You can search your destination from all areas.

– Approximately 11 million POIs are included in this database as of January 2004.

– Some POI information may not be accurate or may become inaccurate through the passage of time. Please directly contact the POI to verify the accuracy of the information about the POI which appears in this database. POI information is subject to change without notice.

Auto Reroute Function

If you deviate from the set route, the system will re-calculate the route from that point so that you remain on track to the destination.

- This function may not work for certain areas.

Assign an Original Image as a Background Image

You can store your own pictures on a CD-R in JPEG format and import original images in this Navigation System. These imported images can be set as a background image.

- Imported original images will be stored in the memory, but saving cannot be guaranteed completely. If original image data is deleted, set the CD-R again and re-import the original image.

Auto CD title and MP3 file listing

Title lists will automatically be displayed when a CD TEXT or MP3 disc is played. This system provides easy-to-operate audio functions that allow playback simply by selecting an item from the list.

Resume play

Before ejecting a DVD-Video/CD/MP3 disc from the unit, you can assign a "resume point" so that when the disc is reinserted, it will begin playback from the point that you left off at.

Manual Overview

This manual provides the important information you need to make full use of your new Navigation System. The beginning sections outline the Navigation System and describe its basic operation. The later sections describe the details of the navigation functions.

Chapters 6, 7 and 8 describe how to operate the AV functions. Please read these chapters when you use a disc in the built-in DVD drive or operate the Pioneer audio equipment connected to the navigation unit.

Please note that when you have decided what you want to do, you can find the page you need from the "**Table of Contents**".

If you want to check the meaning of each item displayed on the screen, you will find the necessary page from the "**Display Information**" at the end of the manual.

To users upgrading the application program

Before using the Navigation System, check that the program has been updated. If not, upgrade it by referring to "Installing the Program" on page 105.

How to use this manual

For reasons of safety, it is particularly important that you fully understand your Navigation System before using it. Be sure to read the Introduction and Chapter 1 in particular.

1

Basic Operation

If you want to use the Navigation System immediately, please read this section. It will explain the basics of operating this system.

This section also describes the basic operations for playing a CD with the navigation unit.

2

Menu and Map Display

Describes how to display the menu screen, and the method of changing map view or map scale.

3

Setting a Route to Your Destination

This section describes various ways of searching the destination, changing the route search conditions, and the route operation during route guidance.

4

Editing the Navigation Utilities

Describes convenient functions for navigation, including how to organize information on places you have visited.

5

Customizing Your Navigation System

The behavior of your Navigation System depends on a number of settings. If you need to change any of the initial settings (default settings), read the relevant section of this chapter.

6

Using the AV Source (Built-in DVD Drive and Radio)

Describes how to use a DVD-Video, CD, MP3 disc and the radio.

7

Using the AV Source (Pioneer AV Equipments)

When Pioneer audio equipment is connected to the navigation unit, that equipment can be operated from the navigation unit. This chapter describes the operation of the audio source that can be used when Pioneer audio equipment is connected.

8

Customizing the Audio Source Setting

Using the audio source, various settings are available to suit your audio-visual taste. This chapter describes how to change the settings.

9

Operating Your Navigation System with Voice

Describes navigation operations such as searching the destination and performing audio operations by voice.

Appendix

Read the appendix to learn more about your Navigation System and such information as the availability of after-care. Please see "**Display Information**" at the end of this manual for checking the details of each item on the menu.

Terminology

Before moving on, take a few minutes to read the following information about the conventions used in this manual. Familiarity with these conventions will help you greatly as you learn how to use your new equipment.

- Buttons on your Navigation Unit are described in **ALL CAPITAL, BOLD** lettering:
e.g.) **POS** button, **NAVI MENU** button.
- Items in the different menus or touch keys available on the screen are described in quotations ("") and bold:
e.g.) "**Destination**", "**Settings**".
- Extra information, alternative use and other notes are presented like this:
e.g.)
 - After removing the disc from the slot, keep it in the case.
- The references are indicated like this:
e.g.)
 - ↪ Setting the Route Options → Page 38

Map Discs for Navigation System

Configuration of data recorded on discs

The map for this Navigation System is supplied on two discs: one for the west and the other for the east. Please set the disc to use according to your destination or current location.

The areas recorded on each disc are as follows:



West area disc



East area disc

- Removing the disc and inserting another disc causes the Navigation System to automatically restart and reload the new route. (This automatic "Reroute" operation cannot be canceled.)

Basic Operation

Flow from Startup to Termination

CAUTION

- If the program is not installed, see page 105 and install the program.

At first, please confirm the positions of the following features using the "Hardware Manual".

- Disc loading slot
- **NAVI/AV** button
- **NAVI MENU** button

1 Start the engine.

After a little time, the navigation opening screen comes on for a few seconds. Then, a message screen is displayed.

- If the disc is not set, the message asking to insert the disc appears. After you set the disc correctly, your Navigation System starts up.

2 Insert the Pioneer DVD map disc to the disc loading slot.

3 Press the NAVI/AV button to switch the Navigation map screen.

Pressing the **NAVI/AV** button switches between the navigation map screen and the audio screen.

4 Check the details of the cautionary message and touch "OK".

You can operate the Navigation System by touching keys displayed on the screen. If the route is already set, it changes to route guidance mode. The map of your surroundings is displayed.

- ↳ How to read the current position screen → Page 29
- ↳ Setting the time → Page 106
- ↳ Starting the operation with voice commands only → Page 64
- Touch keys which are not available at this time are grayed out.

- Be sure to touch the touch keys with a finger. Touch keys cannot be operated by a pen or similar object.
- When the microphone is connected and automatic voice recognition is set, you can operate the Navigation System by voicing "OK" instead of touching the "OK".

5 Press the NAVI MENU button.

Displays the main menu.

6 Searches the destination and gives route guidance.



- ↳ Specifying the address and searching the destination → Page 20
- ↳ Searching the destination by map → Page 33
- ↳ Other search methods → Page 35 to 38

7 Turn off the vehicle engine.

This Navigation System is also turned off.

- Until the vicinity of the destination is reached, the set route will not be deleted even if the power is turned off.








Basic Navigation

The most frequently used function is the Address Search, in which the address is specified and the destination searched. This section describes how to use the **Address Search** and the basics of using the Navigation System. Also, the method of playing CDs is used as an example of switching to the audio source.

CAUTION

- **For safety reasons, you cannot use these basic navigation functions while your vehicle is in motion. To enable these functions, you must stop in a safe place and apply the parking brake.**

Basic flow of operation

- 1 Park your vehicle in a safe place, and apply the parking brake.**

- 2 Insert the Pioneer DVD map disc to the disc loading slot.**

- 3 Press the NAVI MENU button to display the Main menu.**

- 4 Select "Destination" from the Main menu.**

- 5 Select the method of searching for your destination.**

- 6 Enter the information about your destination.**

- 7 Your Navigation System sets the route to your destination, and the map of your surroundings appears.**

- 8 After releasing the parking brake, drive in accordance with the navigation information, subject of course to the important safety instructions noted on page 12-13.**

1 Press the NAVI MENU button to display the main menu.

2 Touch “Address Search”.

Selects the method for searching the destination.



- ▷ **Return Home** → Page 38
- ▷ **Go to** → Page 38
- ▷ **POI Search** → Page 35
- ▷ **Vicinity Search** → Page 36
- ▷ **Address Book** → Page 38
- ▷ **Destination History** → Page 38
- ▷ **Freeway Search** → Page 37
- ▷ **Telephone Search** → Page 38
- ▷ **Cancel Route** → Page 42

3 Touch “Zone code key”.

If the destination is in another zone, this changes the zone setting.

- Once the zone has been selected, you only have to change zones when your destination is outside of the zone you selected.

Zone code key

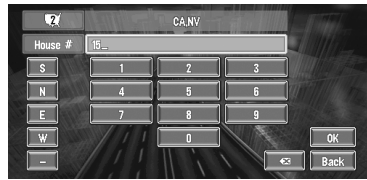


4 Touch the zone code of the destination and touch “OK”.

Modifies the zone setting and returns you to the previous display.

5 Input the house number and touch “OK”.

Touch the characters you wish to input.



The input text is deleted letter by letter from the end of the text. Continuing to press deletes all of the text.

“Back” :

Returns you to previous screen.

- Also input a prefix to the house number.
- If the house number you have input is not found among subsequently selected “Street” or “City” data, a message appears saying that the address has not been found. In that case, try inputting the house number again.
- Touching “OK” with no input allows you to specify and search a street name or the name of the city or area first.

6 Input the street name.

Touch the letter you wish to input. If the next screen is not automatically displayed even though the street name is entered, try touching “OK”.



The input text.

The number of applicable candidates.

“City” :

Touch if you wish to first specify the destination city or area.



The input text is deleted letter by letter from the end of the text. Continuing to press deletes all of the text.

“Sym.” :

You can input text with marks such as “&” and “+”.

“0-9” :

You can input text with numbers.

“Back” :

Returns you to previous screen.

- For example, for “Early California Ct”, you can just enter part of the name, such as “California”.
- When entering the characters, the unit will automatically query the database of all possible options. If there is only one letter that could possibly follow your entry, that letter will automatically be entered.
- When touching **“Back”** on the text input screen to return to the previous screen, you may not be able to input text. In such case, delete the letters entered in the text box.

.....

Searching your destination after specifying the name of city or area

You can narrow down the searching candidates by initially specifying the name of city or area where your destination is located. Inputting the name of the city or area then selecting the destination city or area from the list returns you to the Street Name input screen. Now input the street name, select the street from the list, and proceed to step 9.





In the selected area, if you touch **“City”** without entering the name of city or area, you can check the list of the cities or areas, which you have searched in the past. (This item cannot be selected when searching for the first time with this system or when you have selected an area that you have never searched before.)

.....


7 Touch the street from the list.





Scroll bar

Touching the  or  on the scroll bar scrolls you through the list and allows you to view the remaining items.

➤ Searching the destination by map → Page 33

In the case of an item that cannot be displayed in a single line, touching the  to the right of the item allows you to see the whole line.

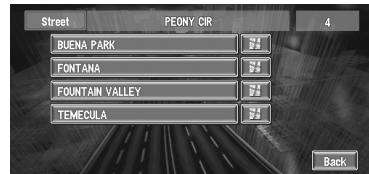
- If only one location is found from the list, route calculation starts after pressing the item.
- Touching the  specifies the selected street and streets intersecting it, allowing you to set an intersection as your destination. This is useful when you don't know the house number of your destination or cannot input the house number of the specified street.
- Touching the  displays a map of the place you have selected. (Candidate place names may appear in the list screen.)

8 Input the destination city or area.

If the list screen is displayed, proceed to step 9.

9 Touch the city or area where your destination is located.

Route calculation starts. When the route calculation is completed, the map of your surroundings appears. (The route is displayed in green or light blue.)




- ❑ If the selected street is very long, and passes through several cities or area, the screen for entering the name of the city or area appears.



If you did not input the house number in Step 5, the house number input screen comes up after the "Street" and "City" are determined. You should now input the house number (perform Step 5).

- ❑ If there is more than one place for the house number input, or if there is no such house number in that place, displays a list of a certain range. To start the route calculation, touch the range within the list you wish to specify as the destination.




- ❑ You can also see the destination on the map by touching the  to the right of the list.
- Searching the destination by map → Page 33
- ❑ If you press the **POS** button during route calculation, the calculation is canceled and the map display appears.
- ❑ When performing a destination search with the route already set, select whether to regard the specified area as your destination and search for a new route, or search for a route via that area.
- Adding way points to the route → Page 42
- Once searched for, a location is automatically stored in the "**Destination History**". → Page 46

10 Drive in accordance with the screen and voice information.

Your Navigation System gives you the following information with the timing adjusted to the speed of your vehicle:

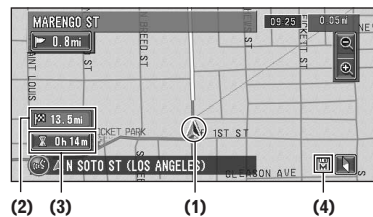
- Distance to the next turning point
- Direction of travel
- Road number of the freeway
- Way point (If this is set)
- Your destination
- How to view the screen → Page 29
- Searching for another route → Page 42
- Canceling route guidance → Page 42

- ❑ Touching the  0.6m allows you to hear the information again.
- ❑ If you deviate from the route with the Guidance set to **Route View** or **Guide View** and enter a street not recorded on the disc, the screen changes to **Map View**. When you return to the route, returns to the original view and resumes route guidance.
- ❑ If you stop at a gas station or a restaurant during the route guidance, your Navigation System remembers your destination and route Information. When you start the engine and get back on the road, the route guidance resumes.
- ❑ Once the route is entered the map data for a certain distance is stored in the navigation unit. Thus, route guidance can take place even when the map disc is removed.
- ❑ If a traffic congestion or closure occurs on the set route ahead, traffic information will appear on the screen and voice information will be provided. At that time, select whether to recalculate for a new route.
- Traffic information → Page 51

How to view Map View screen

This section describes only the items that are displayed on the Map View screen.

- Details of the map screen → Page 29



(1) Current location

(2) Distance to the destination

(3) Estimated time of arrival (or travel time to your destination)

(4) Memory navi indicator

Flashing green indicates that the data is being read. When the data reading has completed, this indicator disappears from the screen.

- Memory navi mode → Page 107

Memory navi mode




While the map disc is inserted, you can store the data on the map disc into the memory of the navigation unit. If the map disc is removed from the navigation unit after the data is stored, navigation is performed using the data in the memory (memory navi mode). In the memory navi mode, you can play a music CD or DVD-Video on the navigation unit while navigation is taking place. The operation is automatically switched to the memory navi mode when the map disc is removed from the navigation unit.

Navigation in the memory navi mode


During the memory navi mode, navigation is performed only using the data read into the memory. Therefore, some functions are restricted compared with navigation using the map disc (DVD navi mode). These functions buttons, which cannot be used in the memory navi mode, are indicated in light gray. (For details, see page 26.) If you want to use these functions, please insert the map disc again. In addition, you may need to insert the map disc and store new data in the memory during navigation operation, such as when the destination is far away. The memory navi mode uses the following map data to perform navigation.

Memory navi indicator

When new route guidance starts, the route data from the map disc is read into the memory of the navigation unit. The status of the memory navi mode is indicated by the following icons on the lower right of the map screen.

-  (Green flashes): Reading the data
-  (Green is lit): Operated in memory navi mode
-  (Red is lit): Operated in memory navi mode, but the distance for guidance is 12.5 mi or less.

- Where the distance for navigation guidance is unknown, the icon flashes red. In that case, the guidance may suddenly fail. It is therefore recommended to reinsert the map disc.

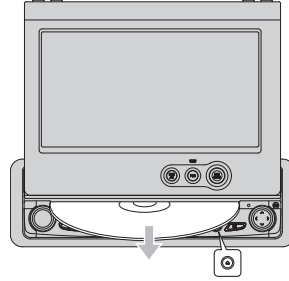
When  disappears, memory navi mode is ready. You can now remove the map disc and use the memory navi mode function.

How to listen to a CD

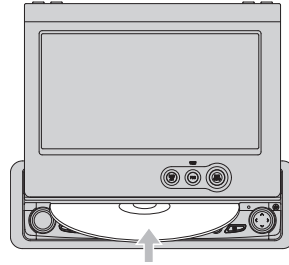
You can listen to a CD by removing the map disc from the navigation unit.

- ▷ About Memory Navigation → "Memory navi mode" on page 24. (For details, see page 107.)

1 Press the EJECT button to remove the map disc.



2 Insert the CD to the disc loading slot.

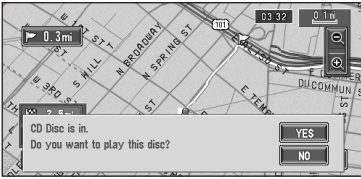


WARNING

- **Be sure to carefully insert the disc horizontally into the disc loading slot. When the disc is inserted halfway, the DVD drive will begin loading automatically.**
- **Do not forcibly insert the disc on an angle, as this indicates that disc is not entering the disc loading slot and may be damaged.**



3 Touch “Yes”.

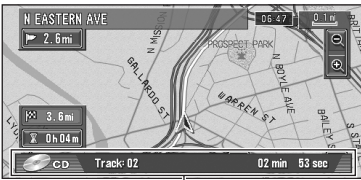


The audio CD set in the navigation unit is played.

- DISC AUTO** is off in the default setting.
- DISC AUTO** → Page 95

4 Press the NAVI/AV button to switch the Audio screen.

Pressing the **NAVI/AV** button switches between the navigation map screen and the audio screen.



Information of Audio



Information of Audio source being played



Distance to the guidance point

Current direction of travel

Next direction of travel

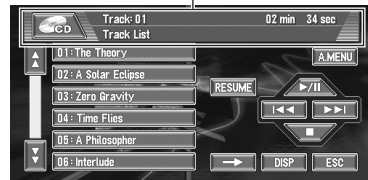
5 Touch the screen to display the touch keys.

The track list and the touch keys are displayed.

6 Touch the track you want to listen to in the track list.

The selected track is played.

Information of track being played



You can also skip backward or forward to another track by moving the joystick left or right.

You can also operate with **◀◀** or **▶▶** of the touch keys.

7 To perform fast forward or reverse, touch → then keep touching ◀◀ or ▶▶.



You can also perform fast reverse/fast forward by holding the joystick left or right.

Stopping playback

1 Touch ■.

When you stop CD playback by touching **■**, that location on the disc is memorized enabling playback from that point when you play the disc again.

To play back the disc again, touch **▶/||**.

For details on the functions, which can be used in the audio source, please see Chapters 6, 7 and 8.

Buttons you can use

The status of the buttons appearing on the screen is indicated by their color. Depending on the function the navigation is performing, you can touch some buttons, while other buttons are not available.



Blue touch key:
The button is operable.



Dark gray touch key:
The function is not available (e.g., operation is prohibited while driving).



Light gray touch key:
The function is not available during memory navigation mode. Or, the function is not available for areas not stored on the disc.
Touching this button activates a message indicating that the function is not available.

Menu and Map Display

This section describes the basic operations, including how to display the main menu and how to use the shortcut menu and the map screen.

How to Use Menu Screens

The basic operation of the navigation is performed by using menus.

There are two types of menu: the "Main menu" and the "Shortcut menu".

- ❑ The functions that cannot be used during the memory navi mode are indicated in light gray. If you want to use such functions, insert the map disc.

Main menu

You use this menu for basic operation of your Navigation System.

- 1 With the map displayed, press the NAVI MENU button.**
- 2 To change to the menu you want to use, touch the name of the menu displayed at the top of the screen.**
The main menu is divided into four: "Destination", "Info/Traffic", "Route Options", and "Settings".
- 3 If you want to return to the map, press the POS (or NAVI MENU) button.**

Destination menu

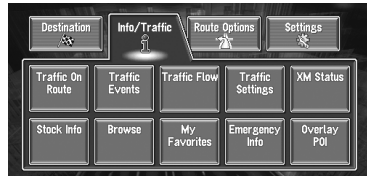


Select the destination search method. Also the route has set can be canceled from this menu.

- Specifying the address and searching the destination → Page 20
- Searching the destination by map → Page 33

- Other search methods → Page 35 to 38

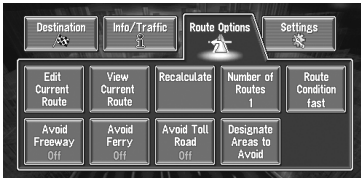
Info/Traffic menu



Use this menu to check traffic information mainly using the GEX-P10XMT XM Digital Satellite Data & Audio Receiver (Sold separately. Traffic information only available for cities where information is provided by XM NavTraffic service. Active subscription to XM NavTraffic required to receive traffic information on the Navigation System.)

- ❑ "Traffic On Route", "Traffic Events", "Traffic Flow", "Stock Info", "Browse", and "My Favorites" can be used only when the the GEX-P10XMT XM Digital Satellite Data & Audio Receiver is connected to the Navigation System (Sold separately. Traffic information only available for cities where information is provided by XM NavTraffic service. Active subscription to XM NavTraffic required to receive traffic information on the Navigation System.)
- ❑ If no XM tuner is connected, touching "XM Status" displays the status "not connected".
- XM Status → Page 54
- ❑ "Traffic On Route", "Traffic Events", and "Traffic Flow" can only be used in DVD navi mode.
- Confirming traffic information → Page 50
- Registering information for emergencies → Page 54
- Locate nearby Auto Service → Page 56

Route Options menu

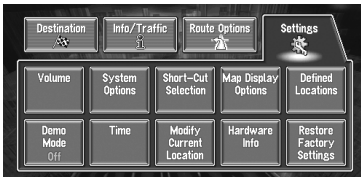


Used to specify the conditions for setting the route to the destination.

➤ Setting the Route Options → Page 38

"**Edit Current Route**", "**View Current Route**", and "**Recalculate**" can be used when the route is set.

Settings menu



Set the navigation functions so they can be used easily.

➤ Settings menu → Chapter 5

Shortcut menu

Shortcuts allow you to perform various tasks, such as route calculation for the location indicated by the scroll cursor, or registering a location in the **Address Book**, faster than using the Main menu.

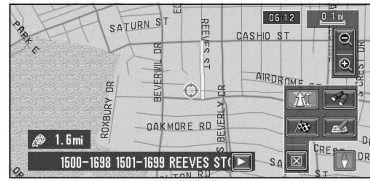
❑ The shortcuts displayed onscreen can be changed. The shortcuts described here are those that can be selected with the system as default setting.

➤ Changing a shortcut → Page 35

1 When the map is displayed, briefly touch any part of the map.

If you continue to touch the map, it will start scrolling.

➤ Moving the map to view the part you want to see → Page 33



: Destination

Displayed when the map is scrolled. Set the route to the place specified with the scroll cursor.

➤ Searching the destination by map → Page 33

: Whole Route Overview

Displays the whole route up to the destination.

: Vicinity Search

You select a location with the scroll cursor. Nearby POIs (Points Of Interest) will also be found.

➤ Registering a place → Page 46
 ➤ Searching the facilities surrounding a certain place → Page 37

: Chg.Route

Can be selected only during route guidance. You can add changes to the route in the route guidance.

➤ Searching another route → Page 42
 ➤ Detour for a specified distance → Page 42
 ➤ Checking the route → Page 40
 ➤ Canceling the route guidance → Page 42
 ➤ Skipping a way point → Page 43

: Registration

Registering the location indicated by the scroll cursor to **Address Book**.

❑ Touching "**Registration**" and selecting "**Save**" allows you to register the location to Address Book.
 ➤ Registering a place → Page 46

: Menu Close

Hides the shortcut icon.

How to Use the Map

Most of the information provided by your Navigation System can be seen on the map. You need to get to know how the information appears on the map.

Switching the current position screen display mode

This section describes how to display the current position screen and change the map display mode.

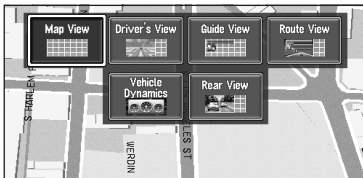
There are four types of map display and two additional view modes.

- **Map View**
- **Driver's View**
- **Guide View** (during route guidance only)
- **Route View** (during route guidance only)
- **Vehicle Dynamics**
- **Rear View** (Only possible when the "CAMERA" is set to "ON".)

1 Press the POS button to display a map of the area around your current position.

2 Press the POS button again.

3 Touch the mode name or press the POS button to select the mode you want to display.



- If the mode is selected by pressing the POS button, the screen automatically switches to the selected map display mode after 4 seconds.

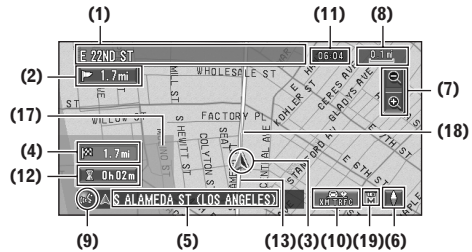
How to view the map of the current location

⚠ CAUTION

- In **Driver's View**, a small gauge with no scale is depicted, but is not intended to be used as a speedometer. Use the actual speedometer of your vehicle to confirm speed.

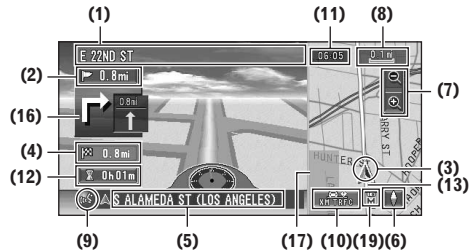
Map View

Displays standard map.



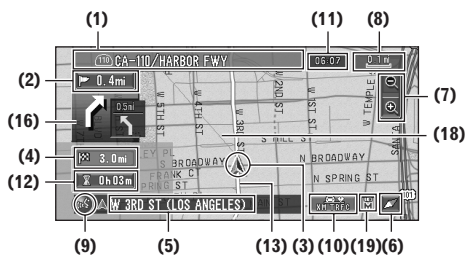
Driver's View

The map from the driver's viewpoint is shown.



Guide View

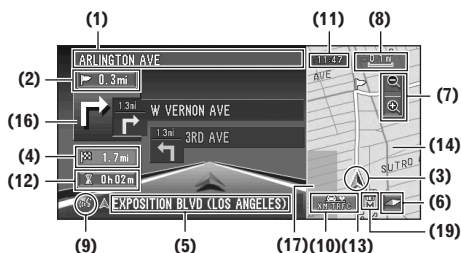
The standard map of your surroundings is overlaid with the name of the street you will turn onto next, and 2 arrows: the larger one to the left indicating the direction of your next maneuver and how far you are from approaching it, and the smaller one to the right indicating the direction of your second to next maneuver and how far you are from approaching it.



Route View

Displays the name of the street you will next travel along and an arrow indicating the direction of travel.

Normal condition



Vehicle Dynamics Display

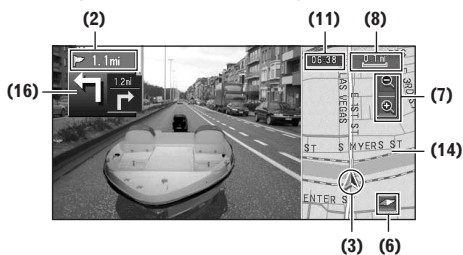
Indicates the status of your vehicle.



- You can change the items indicated to the meters on the left and right.
- In the **Vehicle Dynamics** Display mode, the speedometer display may show a different speed than your vehicle's actual speedometer, because your unit measures speed in a different way.
- Setting the **Vehicle Dynamics** Display → Page 61

Rear View

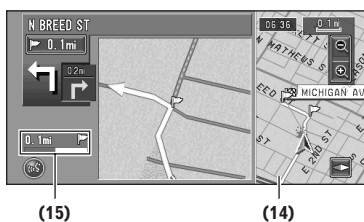
Rear view image is displayed on the left-hand side of the screen, while the map of your surroundings is indicated on the right.



- If the **"CAMERA"** is set to **"OFF"**, the rear view image is not displayed. Please set it to **"ON"**.
- Camera setting → Page 96
- When using a camera set to turn OFF/ON in conjunction with the reversing signal, no camera images will be displayed in rear view mode while you are moving forward.
- If the camera is set always ON, it can display images in rear view mode when the vehicle is moving forward. In that case, you should ask the camera maker or dealer whether the camera's functions or longevity would be affected.
- Rear View** can be displayed at all times (e.g. when monitoring an attached trailer, etc.) as a split screen where map information is partially displayed. Please beware that in this setting, camera image is not resized to fit to screen, and that a portion of what is seen by the camera is not viewable.

Enlarged map of the intersection

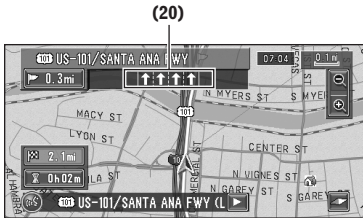
When **"Close-up of Junction"** in the Settings menu is **"On"**, an enlarged map of the intersection appears. If driving on freeway, the special guide illustration is displayed.



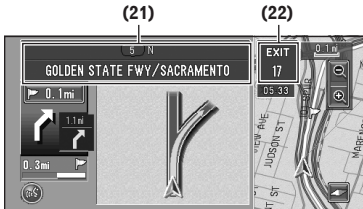
- When set to **Driver's View** and **Vehicle Dynamics**, the system cannot be changed to an enlarged intersection map.

Display during freeway driving

In select locations of the freeway, lane information is available, indicating the recommended lane to be in to easily maneuver the next guidance.

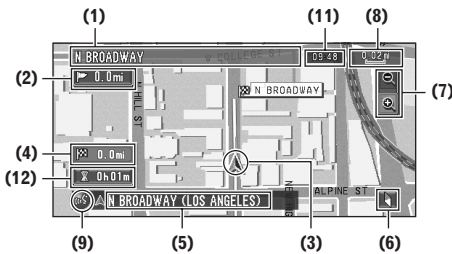


When driving on the freeway, freeway exit numbers and freeway signs may be displayed when in the vicinity of interchanges and exits.



City Map

In certain metropolitan city areas, a more detailed "City Map" is available at the 0.05 mi (50m) map scale or lower.



- Detailed city map is not displayed during the memory navi mode.
- Except when on a freeway, if you are driving by an area where a City Map is available, at the 0.1 mi (100 m) map scale, a message appears informing you that you have entered a city map area.

Display items

Guidance point*

The next guidance point (next turning point, etc.) is shown by a yellow flag.

Destination*

The checker-flag indicates your destination.

(1) Name of the next street to be used*

(2) Distance to the guidance point*

Touch to access the next information.

(3) Current location

The current location of your vehicle. The tip of the triangular mark indicates your heading and the display moves automatically as you drive.

(4) Distance to the destination (or distance to way point)*

If way points are set, the display changes with each touch. When two or more way points are set, the distance to the destination and the distance to the next way point are switched.

(5) Name of the street your vehicle is traveling along (or City Name, etc.)

(6) Compass

The red arrow indicates north. If the scale is less than 25 mi (50 km), touching the map changes the direction it is displayed in (north up/heading up). When the scale of the map is not less than 25 mi (50 km), it is fixed to "north up".

Heading up

The map display always shows the vehicle's direction as proceeding toward the top of the screen.

North up

The map display always has north at the top of the screen.

(7) Zoom in/Zoom out

Touch to change the map's scale.

☞ Changing the map's scale → Page 32

(8) Map scale

The scale of the map is indicated by distance. Except for on the **Vehicle Dynamics** Display, the scale of the map is displayed at the top right of the screen.

☞ Changing the map's scale → Page 32

(9) VOICE icon

Touch to change to voice recognition mode.

- This is displayed only when the microphone for voice recognition is connected.
- The voice operation of the Navigation System → Chapter 9

(10) TRAFFIC icon

This appears when an XM tuner (e.g., GE-P10XMT, sold separately) is connected, and traffic information is received.

(11) Current time**(12) Estimated time of arrival (or travel time to your destination)***

The display changes with each touch.

The estimated time of arrival is automatically calculated from the **Average Speed** set and the actual average speed.

- How to set average speed → Page 64

(13) Tracking mark

The tracking mark shows the route your vehicle has traveled.

- Select the tracking setting → Page 66

(14) Map of your surroundings (Side map)

Touching on the map briefly shows the shortcut menu, while touching longer changes the map to Scroll mode.

- Moving the map to the location you want to see → Page 33

(15) Distance to an intersection*

Displayed on the enlarged intersection map. The green bar gets shorter as your vehicle approaches an intersection.

(16) Next direction of travel*

When you approach an intersection, it appears green. The screen displays the distance to the next guidance point, and the next guidance point after that.

(17) Area to Avoid*

- About detour area → Page 49

(18) Direction line

The direction towards the location set in (4) is indicated with a straight line.

(19) Memory navi indicator

- About memory navi indicator → Page 108

(20) Lane information

Lane information is displayed the first time voice guidance is used. When the guidance screen is displayed near an interchange or exit, the lane information disappear.

(21) Freeway signs



These show the road number and give directional information.

(22) Freeway exit information

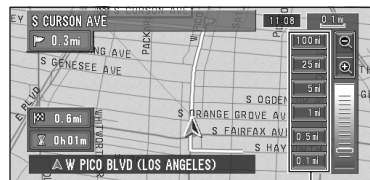
Displays the freeway exit.

- Information with the mark (*) appears only when the route is set.
- Depending on the conditions and settings, some items may not be displayed.

Changing the scale of the map

Touching the "Zoom in/Zoom out" key displayed on the upper right of the screen displays the scale gauge and "Direct scale" key. Directly touching the "Direct scale" key changes the map to the selected scale. Touching  or  above the scale gauge allows you to specify the scale in greater detail within a range of 25 yards - 1000 miles (25 meters - 2000 kilometers).

- In memory navi mode and/or when traversing an area not stored on the disc, selection of the scales is limited.



Direct scale key

- The icon of a registered location and the traffic information icons are displayed when the map scale is 10 miles (20 km) or lower.
- POI icons and the line for traffic congestion and traffic flow are displayed when the map scale is 0.75 mile (1 km) or lower.
- The Direct scale key may not appear depending on the map display mode.

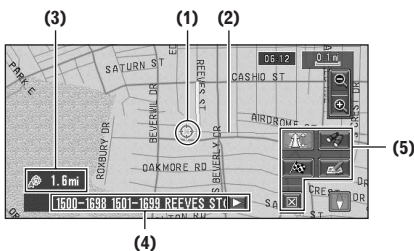
Moving the map to the location you want to see

If you touch the display briefly, the shortcut menu appears.

Touching anywhere on the map for at least 2 seconds changes the map to Scroll mode and the map begins scrolling in the direction you touched. The scrolling stops when you release your finger from the screen. At this time, the scroll cursor appears at the center of the screen. Also a line connecting between the current location and scroll cursor appears.

Pressing the **POS** button returns you to the map of your surroundings.

- Touch the area close to the center of the screen to scroll slowly; touch near the sides of the screen to scroll through quickly.



(1) Scroll location

The position of scroll cursor shows the location selected on the current map.

- When the scale is 0.25 mi (200 m) or lower, the road appears light blue in the vicinity of the scroll cursor.

(2) Direction line


The direction towards the scroll cursor is indicated with a straight line.

(3) Distance from the current location

Shows the distance in a straight line between the location indicated by the scroll cursor and your current location.

(4) The street name, city name, area name and other information for this place.

(The information displayed varies according to the scale.)

Touching the  on the right displays hidden text.

- Displaying information on the specified location → Page 33

(5) Shortcut menu

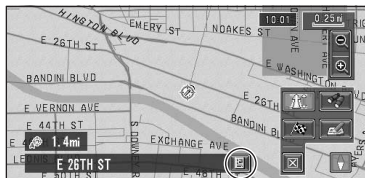
- How to view shortcut menu → Page 28

Viewing the information of a specified location

An icon appears at registered places (home location, specific places, address book entries) and places where there is a POI icon or traffic information icon. Place the scroll cursor over the icon to view detailed information.

1 Scroll the map and move the scroll cursor to the icon you want to view.

2 Touch .



Information for a specified location appears.

The information shown varies according to the location. (There may be no information for that location.)


- Registering places → Page 45
- Displaying facilities (POI) mark on the map → Page 37
- Using traffic information → Page 50

3 Touch “Back”.

You are returned to the previous display.

- In the memory navi mode, you can only see detailed information for registered points (when available).

Finding a destination on the map

If you search the location you want to visit by scrolling the map, and touch  in the Shortcut menu, you can specify your destination on the map.

1 Press the **POS** button to access the map screen.

2 Touch the map for at least 2 seconds.

The map display changes to Scroll mode.

3 Scroll the map and move the scroll cursor to the place you want to make your destination.


- ⇒ Moving the map to view the part you want to see → Page 33

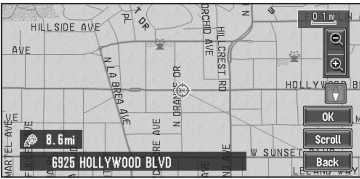
4 Touch .

- If you press the **POS** button during route calculation, the calculation is canceled and the map display appears.



When the appears on the right of the list

You can also set a destination by touching the  to the right of the list. Touch "**OK**" to confirm. The location pointed by the scroll cursor will be set as a destination.



Alternative option:

Scroll :

The map display changes to the map with Shortcut menu.

If you touch anywhere on the map, the map display changes to Scroll mode.

- ⇒ Shortcut menu → Page 28



Setting a Route to Your Destination

⚠ CAUTION

- For safety reasons, these route-setting functions are not available while your vehicle is in motion. To enable these functions, you must stop in a safe place and put on the parking brake before setting your route. (see page 12 Interlock for details)

- Some information on traffic regulations by days or time depends on the time when the route calculation is performed. Thus, the information may not correspond with a certain traffic regulation when your vehicle actually passes the location. Also, the information on the traffic regulations provided will be for a passenger vehicle, and not for a truck/lorry or other delivery vehicles. Always follow the actual traffic regulations when driving.
- If you press the **POS** button during route calculation, the calculation is canceled and the map display appears.
- When the map disc is inserted, the reroute is done by force. (This rerouting cannot be canceled.)

Finding Your Destination by Selecting the Type of Facility

Information about various facilities (Points Of Interest - POI), such as gas stations, amusement parks or restaurants is available. By selecting the category (or entering the POI Name), you can search for a Point Of Interest.

- You can also narrow down the search range by initially specifying the name of the city or area where your destination is located.

Searching for Points of Interest (POI)

- 1 Touch “Destination” in the Main menu, and then touch “POI Search”.
- 2 Touch the zone code key of the destination and touch “OK”.
 - ▷ Selecting the zone where you want to search → Page 21
- 3 Touch “Category”.



“Name” :

Touch if you wish to first specify the POI Name.

“City” :

Touch if you wish to first specify the destination city or area.

- 4 Touch the desired category.

POI's are divided into several categories.



If the category is not sub-divided into more detailed categories, the list will not be displayed. Proceed to Step 6.

5 Touch the subcategory.

6 Input the name of the POI.


If the list does not automatically appear when the name of the POI has been entered, try touching "OK".

"City" :

First, touch to specify the destination city or area.

- If less than six POIs in a subcategory are registered, the screen for inputting the POI name is not displayed. Please proceed to Step 7.

7 Touch POI for your destination.

- Touching the  displays a map of the surroundings of the selected POI.
- Searching the destination by map → Page 33
- If the selected POI is the name of a chain of outlets and consequently the same store name applies to different locations (the number of outlets appears next to the chain's name), touch the name of the POI to display a list of those POIs and touch the particular POI that is your destination.

Finding a POI in your surroundings

You can search for Points Of Interest in your surroundings on the map. Use it to find a POI to visit during a journey.

1 Touch "Destination" in the Main menu, and then touch "Vicinity Search".

The list of Points Of Interest categories appears. As default setting, four icons are displayed on the bottom: **Fast Food Chains, Restaurant Chains, Restaurant, Groceries.**

2 Touch the desired category.



The selected category will have a red check mark.

OK :

Starts searching


Back :

Returns to the previous screen

Set :

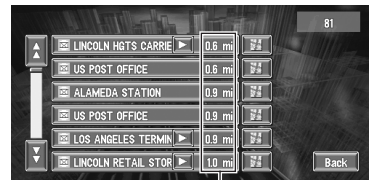
Display the screen for registering POI shortcut

➤ Register POI shortcut → Page 44


- If you want to search with more detailed categories, touch . When the subcategory list appears, touch the item and touch "Back". When only a few types of the detailed categories are selected, blue check marks will appear.
- The bottom icon is for shortcuts to your favorite categories. Touching the shortcuts icon displays a list of the facilities in a category.
- You can select the detail category for up to 100 items.

3 Touch POI.

Names of POIs and their distance from your current location appear. They are listed in nearest-to-furthest order. To the left of each item is an icon indicating the category.



Distance to the facility


- When you touch , the POIs around the specified location are shown on a map.
- Searching the destination by map → Page 33
- Searching range is approximately 10 miles (16 km) square from the current location.

Searching the facilities around the scroll cursor

1 Scroll the map and move the scroll cursor to the place you want to search POI.

2 Touch .

See Step 2 of "Finding a POI in your surroundings" for the following operations.

- Finding a POI in your surroundings → Page 36
- ❑ This can be used when setting the overlay POI icon to display as a shortcut on the map screen.
- Changing Shortcut → Page 65
- ❑ The distance indicated in the search result is the distance from the scroll cursor to the facility.
- ❑ The bottom icon is for shortcuts to your favorite categories. Touching the shortcuts icon displays a list of the facilities in a category.
- ❑ "Vicinity Search" in the Main menu searches your surroundings. On the other hand, in the case of  in the Shortcut menu (→ Page 28), the area around the scroll cursor will be searched.

Displaying certain POI on the map

Selected Points Of Interest (POI) in a certain category can be shown on the map, and you can check the location on the display while driving.

- ❑ This can be used when setting the overlay POI icon to display as a shortcut on the map screen.
- Changing Shortcut → Page 65

1 Touch any part of the map screen.


The Shortcut menu appears.

2 Touch .

The list of POI categories appears.

3 Touch the category you want to display.

The selected item is marked. If you want to select other categories, repeat this step.

- ❑ If you want to search with more detailed categories, touch . When the subcategory list appears, touch the item you want to display and touch "Back".
- ❑ You can select the detail category up to 100 items.

4 Touch "Back".

POI's in the selected category appear on the map.

- Searching the destination by map → Page 33
- Viewing the information of POI → Page 33

5 When some sub-categories are selected, the corresponding category is marked blue. When all the sub-categories within a category are selected, that category is marked red.

Setting an Entrance or Exit of a Freeway as Your Destination

You can set the entrance or exit of a freeway as your destination.

1 Touch "Destination" in the Main menu, and then touch "Freeway Search".

The display for entering the name of the freeway appears.

2 Touch the zone code key of the destination and touch "OK".

3 Enter the name of the freeway and touch "OK".

The list of freeways matching the name appears.


4 Touch the freeway.

The display for selecting your destination to the entrance or to the exit of the freeway appears.

5 Touch "Entrance" or "Exit".

The list of entrances to, or exits from, the selected freeway appears.

6 Touch your destination.

- ❑ You can also see the destination by touching the  on the right of the list.
- Searching the destination by map → Page 33

Searching for Your Destination by Specifying the Telephone Number

If you know the telephone number of your destination, you can quickly search for your destination by specifying the telephone number.

1 Touch “Destination” in the Main menu, and then touch “Telephone Search”.

The telephone number entry screen appears.

2 Input a telephone number.

- If there is more than one place for the number input, a list of those places is displayed. Touch the item you want in the list and proceed to step 3.

3 If the displayed place is satisfactory, touch “OK”.

Touching “Scroll” changes the destination.

- ▷ Searching the destination by map → Page 33

Route Calculation to Your Home Location or to Your Favorite Location

If your home location is registered, the route home can be calculated by a single touch of the touch key from the Main menu. Also, you can register one location, such as your workplace, as your favorite location, and the route is calculated in a similar way.

1 Touch “Destination” in the Main menu, and then touch “Return Home” or “Go to”.

- ▷ “Registering your home and your favorite location” → Page 45

Selecting Destination from the Destination History and Address Book


Any place that has been searched before is stored in the “Destination History”. Places that you have registered manually, such as your home, are stored in the “Address Book”. Simply select the place you want to go to from the list and a route to that place will be calculated.

1 Touch “Destination” in the Main menu, and then touch “Address Book” or “Destination History”.

2 Touch your destination name.



Route calculation starts.

- ▷ For information on the **Address Book** → Chapter 4
- ▷ For information on the **Destination History** → Chapter 4
- You can also see the destination by touching the  on the right of the list.
- ▷ Searching the destination by map → Page 33

Modifying the Route Calculation Conditions

You can change the route calculation conditions using the Route Options menu. The following description features an example of changing the number of the route to be searched.

1 Touch “Route Options” in the Main menu.

The Route Options menu appears.

2 Touch “Number of Routes”.

The content currently set appears under the name of the item. Each time you touch the item, the setting changes. Repeatedly touch the item until the value you want to set appears.



Items that users can change

This section describes the details of the setting for each menu. Settings marked with an asterisk (*) show that they are default or factory settings.

Edit Current Route

- ▷ "Reroute" or "XX mile/km detour" → Page 42
- ▷ "Cancel Route" → Page 42
- ▷ "**Route Scroll**" → Page 40 (Step 3 and 4)
- ▷ "**Route Profile**" → Page 41 (Step 3 and 4)
- ▷ "Skip way point" → Page 43

View Current Route

- ▷ View Current Route → Page 41

Recalculate

- ▷ "Reroute" or "XX mile/km detour" → Page 42
- ▷ "Cancel Route" → Page 42
- ▷ "**Route Scroll**" → Page 40 (Step 3 and 4)
- ▷ "**Route Profile**" → Page 41 (Step 3 and 4)
- ▷ "Skip way point" → Page 43

Automatically searches the route to the destination again.

- "**Recalculate**" is displayed only when the route is set.

Number of Routes

This setting controls whether the system should calculate only one route, or several routes.

1*:

Only one route judged as being optimum by your Navigation System is calculated.

Multiple :

Several route options are calculated (maximum 6 routes).

Route Condition

This setting controls whether the route be calculated with taking into account the time or the distance.

Fast* :

Calculate a route with the shortest travel time to your destination as a priority.

Short :

Calculate a route with the shortest distance to your destination as a priority.

Avoid Freeway

This setting controls whether or not freeways may be included in the road calculation. (A route using freeway may be calculated in some cases, such as when setting your destination far away.)

On :

Calculate a route that avoids freeways.

Off* :

Calculate a route that may include freeways.

Avoid Ferry

This setting controls whether or not ferry crossings should be taken into account.

On :

Calculate a route that avoids ferries.

Off* :

Calculate a route that may include ferries.

- The system may calculate a route that includes ferries even if "On" is selected.

Avoid Toll Road

This setting controls whether or toll roads (including toll areas) should be taken into account.

On :

Calculate a route that avoids toll roads (including toll areas).

Off* :

Calculate a route that may include toll roads (including toll areas).

- The system may calculate a route that includes toll road even if "On" is selected.

Designate Areas to Avoid

- ▷ About Areas to Avoid → Page 49

Perform the route calculation of the several route options, and select one

You can get route calculations of several route options. After route options are calculated, select the one you want.

1 Set the "Number of Routes" to "Multiple".

- ▷ Changing the search conditions → Page 39

2 Search your destination and set the route.

Calculated routes are shown in different colors (from two to six routes).

3 Touch "Next" to change the displayed route.



The following information is displayed on this screen:

(1) Route calculation condition

Displaying the conditions set by the Route Options menu by icon.

- Use/avoid freeway
- Use/avoid toll road
- Use/avoid ferry

Displaying impracticability of fulfilling the conditions by icon.

- Pass through Area to Avoid
- Use toll road against the setting "Avoid Toll Road" is "On". Use Ferry against the setting "Avoid Ferry" is "On".

(2) Distance to your destination

(3) Travel time to your destination

- The "Avoid Freeway" setting may not be reflected, depending on the distance to the destination.
- You can see other places while displaying a candidate route by scrolling the map. Touching "Next" moves the next candidate route to the center and indicates the map.

4 Touch "Information" to check the information on the selected route.

You can also check details of the roads along the selected route. (If you touch "Back", you can return to the previous display.)

- "Route Scroll" → Page 40 (Step 3 and 4)
- "Route Profile" → Page 41 (Step 3 and 4)
- After the route is calculated, it may take some time until the detailed route information (Route Profile) can be confirmed.

5 Touch "OK".

The route you selected is accepted, and the map of your surroundings appears. When you start driving, the route guidance begins.

- If the above operations are not performed within 30 seconds after the route calculation is completed and you have already started your vehicle, the route selected at the time is automatically chosen.

Checking the Set Route

You can check information about the route between your current location and your destination.

You can select two methods: checking the passing streets with a list; and checking the shape of the route by scrolling the map along the route.

Checking the set route with the map

1 Touch the map screen.

The Shortcut menu appears.

2 Touch .

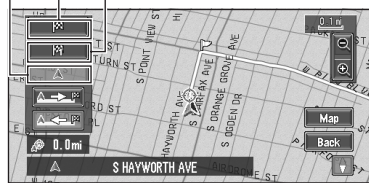
The Route/Detour menu appears.

3 Touch "Route Scroll".

The screen to select the point to start scrolling appears.

4 Touch the point to start scrolling.

(1) (3) (2)



You can select the following items:



(1) Starting Point

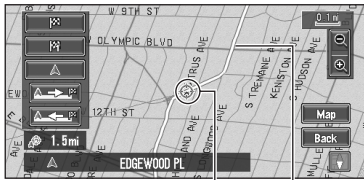
(2) Way Point (If this is set)

(3) Destination

- If you have selected "Way Point", a list of the way points on the route is displayed. Touch the place you want to start scrolling from and proceed to step 5.

5 Touch or to scroll the map.

To continue scrolling after you release your finger, touch and hold  or . If necessary, the scale of the map can be changed.



Scroll Cursor

Current Route

You can select the following items:

Map :

The scroll screen is displayed.

- Searching the destination by map → Page 33

6 Touch “Back”.

You can return to the previous display.

Checking the set route with text

This function is not available if your vehicle has deviated from the set route.

- When **Route Profile** is selected during the memory navi mode, the information up to the location in which the route is in the memory is displayed.

1 Touch the map screen.

The Shortcut menu appears.

2 Touch .

The Route/Detour menu appears.

3 Touch “Route Profile”.

4 Check the contents on the display.

As necessary, scroll the list.

Name of the streets you are driving through



Driving distance

5 Touch “Back”.

You can return to the previous display.

- When a long distance route is calculated, your Navigation System may not be able to list all the roads. (In this case, the remaining roads will be shown in the list as you drive on.)

Checking the set route from the Route Options menu

You can also check the information about the set route from the Route Options menu.

- When **View Current Route** is selected during the memory navi mode, the information up to the location in which the route is in the memory is displayed.

1 After touching “Route Options” in the main menu, touch “View Current Route”.

- “View Current Route” is displayed only when the route is set.

2 Touch “Scroll”, “Profile” or “Overview”.

Overview :

A map of the whole route up to the destination is displayed.


- “Profile” → Page 41 (Step 3 and 4)
- “Scroll” → Page 40 (Step 3 and 4)

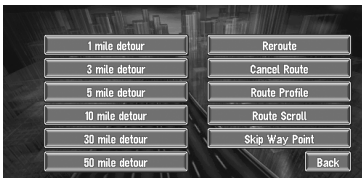
3 Touch “Back”.

You can return to the previous display.

Recalculating the Route to Your Destination

You can set the length of the area, and avoid just that area, or you can even search a new route from the current location to your destination. (On the map screen during route guidance, try the following operations.)

- 1 Touch the map screen.**
The Shortcut menu appears.
- 2 Touch .**
The Route/Detour menu appears.
- 3 Touch “Reroute” or the distance from the list.**



After the route is calculated, the map screen shows your surroundings and route guidance is resumed.

On this display, you can select the following items:

Reroute :

The route from the current position to your destination is recalculated.

The distance of the detour (1-50 mile/km) :

Searches detours of a specified distance in the route ahead of your current position.

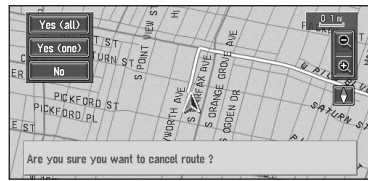
- For details of switching the display between “mile”(miles)” and “km” see “**KM/Mile Setting**” → Page 64

Canceling the Route Guidance

If you no longer need to travel to your destination or if you want to change your destination, follow the steps below to cancel the route guidance.

- 1 Touch “Destination” in the Main menu, then touch “Cancel Route”.**
The message confirming whether to cancel the current route appears.

2 Touch “Yes (all)”.



The current route is deleted, and a map of your surroundings reappears.

On this screen, you can also select the following items:


Yes (one) :

Route is recalculated by canceling the selected way point.

- Deleting a way point from the route → Page 43

No :

Returns to the previous display without deleting the route.

- ☐ You can also cancel the route using the  **Chg.Route** in the shortcut menu.

Adding Way Points to the Current Route

You can select way points (locations you want to visit on the way to your destination) and you can recalculate the route to pass through these locations.

Adding a way point

You can add up to five way points. This is achieved as follows :

1 Specify the location you want to visit.


Specify a way point in the same way as specifying a destination.

At completion of the location search, a message is displayed asking whether or not to set that specified location as the destination, or as a pass-through location.

2 Touch "Way Point".

3 Confirm the contents of the list, and touch "Done".



- You can see the way point by touching the  on the right of the list.

Route calculation with the specified location as a way point starts when you touch "**Done**". On this display, you can select the following items:

Add :

Switch the display to search for points. Display a point you searched for on a map after searching, then touch "**OK**" and add to the way points. (You can add up to five way points in total.)

Delete :

You can delete way points from the list.

Sort :

Touch to display a screen listing the way points.





Automatic :

You can sort the destination and way points automatically. The system will show the nearest way point (distance in a straight line) from the current location as way point 1, and sort the other points (including your destination) in order of distance from the way point before your current location.

Original :

Returns to the original order.

Select either "**Automatic**" or "**Original**" and touch "**Done**" to start the route search. Touching  or  on the left of the list, you can sort the way points manually.

- If you set a way point(s) in the route to your destination, the route up to the next way point will appear light green. The rest of the route will be light blue.

Skipping a way point

If the points are set, the next way point along the route can be skipped.

1 Touch the map screen.

The Shortcut menu appears.

2 Touch .

The Route/Detour menu appears.

3 Touch "Skip Way Point".

A message asking whether you want to skip the next way point appears.

4 Touch "Yes".

A new route to your destination through all the remaining way points, except for the skipped way point, is calculated.

Deleting a way point from the route

If you no longer need to pass through a way point you have not yet reached, you can delete that place from the list of way points and calculate a new route.

1 Touch "Destination" in the Main menu, then touch "Cancel Route".

A message asking whether you want to cancel the route appears.

2 Touch "Yes (one)".

3 Touch the way point you want to delete.



- If you want to delete other way points, touch "**Delete**" and repeat Steps 3 above.

4 Touch “Done”.

A new route to your destination via the remaining way points is calculated.

- You can also cancel the route using the  **Chg.Route** in the shortcut menu.

Adding and deleting way points using the Route Options

1 Touch “Route Options” in the Main menu, and then touch “Edit Current Route”.

This displays a screen for adding or deleting way points. The method is the same as described in "Adding a way point" and "Deleting a way point from the route".

- **“Edit Current Route”** is displayed only when the route is set.
- ▷ "Adding a way point" and "Deleting a way point from the route" → Page 42

Registering POI shortcuts

You can register up to six shortcuts to your favorite POI.

1 Touch “Destination” in the Main menu, and then touch “Vicinity Search”.

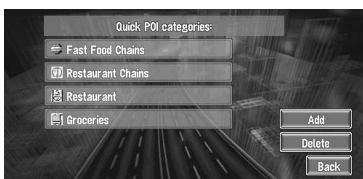
2 Touch “Set”.



Displays a list of already registered POI shortcuts.

- Four POI shortcuts are registered as the default setting: **Fast Food Chains, Restaurant Chains, Restaurant, Groceries.**


3 Touch “Add”.



Displays a POI category list.

4 Touch category or .





Touching category adds that category to the shortcuts. After touching , please proceed to Step 5 and select a subcategory.

5 Touch subcategory.

The selected category is added to the list of POI.

When registering another icon, repeat steps 3 through 5.

- You can register a POI shortcut by touching **“Overlay POI”** under **“Traffic/Info”** in the main menu, or by touching the icons such as  and  on the map. The registering steps are the same as described above.

Deleting a POI shortcut

1 Touch “Destination” in the Main menu, and then touch “Vicinity Search”.

- You can also touch  in the shortcut menu or **“Traffic/Info”** in the main menu, then touch **“Overlay POI”**.

2 Touch “Set”.

3 Touch “Delete”.

Displays a list of already registered POI shortcuts.

4 Touch the category to be deleted.

A red check appears on the selected shortcut. **All :**

A red check will appear on all registered categories.

5 Touch “Delete”.

Deletes the selected shortcut from the list.

Editing the Navigation Utilities

CAUTION

- For safety reasons, these functions are not available while your vehicle is in motion. To enable these functions, you must stop in a safe place and put on the parking brake before setting your route. (see page 12 Interlock for details)

Editing Registered Locations

The **Address Book** can store up to 300 registered locations. These can include home location, favorite places, and destinations you have already registered. This registered location information can also be modified. Also, routes to registered locations can be calculated by touch screen. Registering places you visit frequently saves your time and effort.

- You can register up to 100 entries for voice operation. Two out of those 100 entries are allocated to the items that are registered to **"Return Home"** and **"Go to"**.
- The Address Book is automatically updated in alphabetic order. However, **"Return Home"** and **"Go to"** always appear at the top.

Registering your home and your favorite location

Of the 300 registered locations that can be stored, home location and favorite locations can be stored separately in the **Address Book**. Registering your favorite location for the first time is described here. You can change the registered information later. You might find it useful to register your workplace or a relative's home as your favorite location.

Map icons:



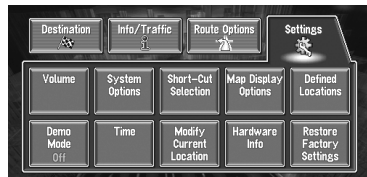
Home location icon



Favorite location icon

- 1 Touch **"Setting"** in the Main menu, then touch **"Defined Locations"**.
- 2 Touch **"Set "Go To"™"**.

When registering your home location, touch **"Return Home"**.



You can select a method of location search on the display.

- The items already registered under **"Return Home"** or **"Go to"** can be modified.
- 3 Search for a location to register.
 - Information on searching locations to register → Page 35 to 38

- 4 Point the scroll cursor to the location you want to register and touch **"OK"**.

- 5 Touch **"Save"**.

Completes the registration.


- If you want to stop registration, touch **"Back"**.
- Items registered under **"Go to"** can be edited and used for voice recognition.
 - "Editing a location's information" → Page 46

Registering a previous location in the Address Book

Once a destination or way point is searched, it is automatically retained and stored in the

Destination History. If a search is canceled while still in progress, only the places where the map was displayed and scrolled through or places where the short-cut menu was displayed are retained and stored. Note that after 100 places are stored, new places are automatically overwritten on top of old ones, in oldest to most recent order. Therefore, to ensure that certain places are kept and not overwritten, be sure to register them in the **Address Book**.

1 Touch “Destination” in the Main menu, then touch “Destination History”.

2 Touch  on the right-hand side of the place you want to register in the Address Book.



 :

That place can be registered or deleted.

 :

The map of that place can be displayed.

↳ Searching the destination by map → Page 33

3 Touch “Registration”.

4 Touch “Save”.


Registration is now complete.

□ If you want to stop registration, touch **“Back”**.


↳ “Editing a location’s information” → Page 46

↳  in the Shortcut menu → Page 28

Editing a location’s information

In the Address Book menu, touching the  on the right-hand side of the place displays the Address Book Operate menu.

To edit the information about the location:

- 1 Touch “Destination” in the Main menu, then touch “Address Book”.**
- 2 Touch  on the right-hand side of the place whose information you want to edit.**



 :

The information related to that place can be edited.

 :

The map of that place can be displayed.

↳ Searching the destination by map → Page 33

Add:

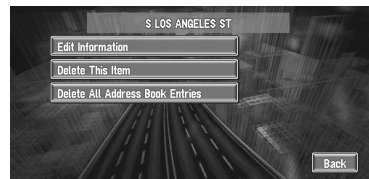
The screen for selecting the method for registering the location in the Address Book appears.

↳ Registering the location → Page 35 to 38

 :

Displayed on the left-hand side of places that can be searched by voice command.

3 Touch “Edit Information”.



The Address Information menu appears. Refer to the item corresponding to the subsequent operation. After finishing the operation, the Address Book menu appears. You can continue to edit other information items if necessary.



(1) Name

The name can be used as a command for voice operation.

(2) Name (2nd line)

The name of the city appears in this column. (Not editable)

(3) Phone number

You can search by registered telephone number.

(4) Pictograph

The symbol displayed on the map.

(5) Sound

The selected operating sound is played.

(6) Modify Location

You can change the registered location by scrolling the map.

Changing a name

1 Touch “Edit Name” and touch “Yes”.

The message confirming whether or not to register the entered name as voice command is displayed.

Alternative option :

No :

When not registering a name as a voice command, select “No”.

2 Enter a new name; touch “OK”.

The name of the current location appears in the text box. Delete the current name, and enter a new name between 6 and 23 characters long. (If you selected “No” in Step 1, you can enter a new name between 1 and 23 characters long.)

3 If the pronunciation is correct, touch “Yes”.



The details you set are registered, and the Address Book menu appears.


Alternative options :

No :

Select to return to the display for entering characters.

Repeat :

You can reconfirm the pronunciation of the name you entered.

- When you select “Yes”,  is shown on the left side of the location name displayed in the Address Book menu. This mark indicates that this name can be used as a voice command during voice operation.
- You cannot change the name of your home.
- During voice operation, you can get a route calculated by saying the registered name.
- Information on voice operation → Chapter 9

Entering or changing a phone number

1 Touch “Edit Phone Number”.

2 Input a phone number; touch “OK”.

The Address Information menu appears.

- To change a registered phone number, delete the existing number and then enter a new one.

Selecting a pictograph to appear on the map

1 Touch “Select Image”.

2 Touch the Pictograph to appear on the map.

The Address Information menu appears.

- You cannot change the mark of your home or of your favorite location.

Selecting sound

1 Touch "Select Sound".

2 Select the sound.

The Address Information menu appears.
If you want to hear the operating sound, touch



Modify the Location

➤ Changing the position of locations → Page 48

Deleting Address Book or Destination History Information

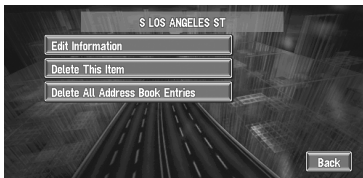
Items registered in the **Address Book** or **Destination History** can be deleted. All entries of the data in the **Address Book** or **Destination History** can be deleted at once.

1 Touch "Destination" in the Main menu, then touch "Address Book".

To delete items in the **Destination History**, touch **Destination History**.

2 Touch on the right-hand side of the place you want to delete.

3 Select the deletion method.



A message confirming deletion appears.

Alternative options :

Delete This Item :

Delete the location selected in Step 2.

Delete All Address Book Entries (or Delete All Destinations) :

Delete all the Address Book or Destination History data.

4 Select "Yes".

The data you selected is deleted.

Alternative option:

No :

The display shown in Step 3 appears.

- ❑ Because deleted data cannot be restored, take extra care not to select **Delete All Address Book Entries** by mistake.

Changing the position of locations registered in the Address Book

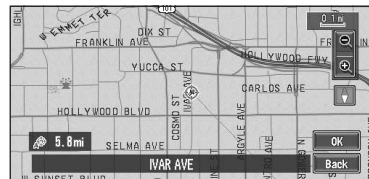
You can select a location registered in the **Address Book**, display a map of its surroundings, and change its position.

1 In the Address Book menu, touch on the right-hand side of the place whose position you want to change.

2 Touch "Edit Information", and then touch "Modify Location".

The map of the selected area and its surroundings appears.

3 Touch the display to change its position, then touch "OK".



The position is changed.

- ❑ Touching **"Back"** returns to the previous screen without changing the location.

Loading registered locations data from a CD-R

Address Book data stored on a CD-R (-RW) can be loaded to the Navigation System.

This function is used when moving Address Book data from a Pioneer navigation unit with a PC card slot (e.g., AVIC-88DVD) to a Pioneer navigation unit without a PC card slot (e.g., AVIC-N2).

- ❑ When moving data, copy the folder named **"POINT"** from the PC card to the personal computer. Then use the personal computer to store the **"POINT"** folder in the first level of the CD-R (-RW).

- 1 **Insert the CD-R (-RW) to the disc loading slot.**
- 2 **Touch “Settings” in the Main menu, then touch “System Options”.**
- 3 **Touch “Read from Disc”.**
The list of groups appears.
- 4 **Touch the desired group.**
- 5 **Touch the desired locations.**
Selected locations are marked. To load the data from other locations, repeat this step.
Alternative option:
Select All:
All the locations are selected (or canceled) at once.
- 6 **Touch “OK”.**
The data of the selected locations is stored in the Address Book.

Setting Areas to Avoid

If you register **Areas to Avoid**, such as crowded intersections or congested areas, routes can be calculated that avoid those areas. **Areas to Avoid** can be set from the Route Options menu.

- An area not stored on the disc cannot be set as an Area to Avoid.

Registering an area to avoid

This section describes how to register an Area to Avoid for the first time. You can register up to five Areas to Avoid.

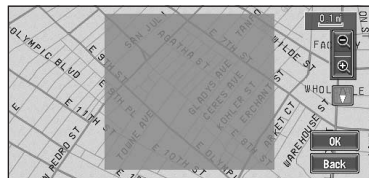
- 1 **Touch “Route Options” in the Main menu, then touch “Designate Areas to Avoid”.**
- 2 **Select one of the items shown in “New Area”.**
When registering for the first time, any item on the list is shown as **“New Area”**.



- 3 **Select the place to register and display the map.**
 - ▷ Searching places to register → Page 35 to 38
 Once a search is complete, a map with the specified location at its center appears.
- 4 **Change the map scale and decide the size of the Area to Avoid.**
The Area to avoid is enclosed in a red frame.

You can also change the map scale though the maximum map scale for registering Areas to Avoid is 0.1 mile (100 m).

- 5 **Scroll the map, adjust the position of the red frame, and touch “OK”.**



If you want to stop registration, touch **“Back”**.

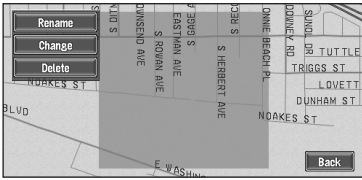
- Depending on the setting of route search conditions, you may not be able to avoid the specified areas. The confirmation message is displayed on the screen at this time.
- ▷ Information on route calculation conditions → Page 40

Changing or deleting an area to avoid

You can subsequently change/rename/delete an Area to Avoid.

- 1 **Touch “Route Options” in the Main menu, then touch “Designate Areas to Avoid”.**
- 2 **Select the area you want to change or delete.**

3 Select the desired operation.



On this screen, you can select the following options:

Rename :

Changes the name. Enter the new name and touch **“OK”**. This returns you to the Route Options menu.

Change :

A specified area can be changed. For the next steps, see Step 3 in the “Registering an area to avoid” above .

Delete :

Delete the selected Area to Avoid.

Using XM NavTraffic Information

If you have a GEX-P10XMT XM Digital Satellite Data & Audio Receiver (sold separately) attached to the Navigation System, and have an active subscription to XM NavTraffic service, you can view current traffic conditions and information on your Navigation display. When the unit receives updated traffic information, the Navigation system will overlay the traffic information on your map, and also display detailed text information when available. When you are traveling along a route and there is traffic on your current route, the system will automatically detect it, and ask you if you would like to be rerouted. (In such case, route calculation takes into consideration a 92 mile radius of alternative routes and its traffic conditions from your current location).

- ❑ The “traffic congestion” in this section indicated the following types of traffic information; stop and go, stopped traffic, closed/ blocked roads. This information is always taken into consideration for checking your route, and the information related with these events cannot be turned off. Additionally, the system also take into consideration the traffic flow information if **“Use the traffic flow information”** is **“On”**.

Viewing traffic information

Traffic Information is displayed onscreen in a list. This allows you to check how many traffic incidents have occurred, their location, and their distance from your current position.

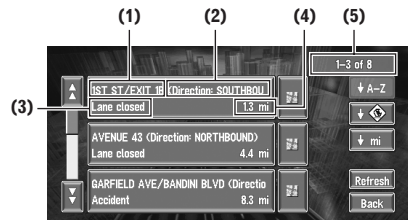
Checking all traffic information

1 Touch **“Info/Traffic”** in the Main menu, then touch **“Traffic Events”**.

The list with received traffic information is shown.

2 Touch or to view the incident list.

Places (street names) where incidents have occurred are displayed in the list.



(1) Street or place

(2) Direction

(3) Incident

(4) Distance to the location

(5) The incident numbers currently displayed and the total number of incidents

- ❑ The incidents that have already been read will be displayed in white. Unread incidents will be in yellow.
- ❑ Touching the allows you to check the place on a map. (Traffic information without positional information cannot be checked on a map.)



You can sort the traffic information in alphabetical order.



You can sort the traffic information according to the incident.





You can sort the traffic information by distance from your current position.

Refresh :

When new traffic information is received, current information is changed, or old information has been removed, the list is updated to reflect the new situation.

3 Select an incident you want to view in detail.

The details of the selected incident are displayed.

- Touching an incident you want to see allows you to view the detailed information of the incident. If the information cannot be displayed on one screen, touch  or  to view the remaining information.

4 Touch "Back" to return to the list with traffic information.

A list with traffic information appears again.

Checking traffic information on the route

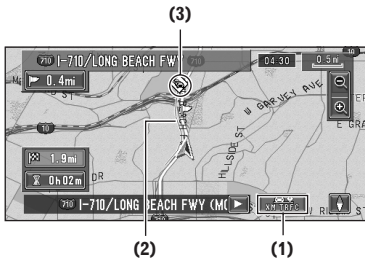
1 Touch "Info/Traffic" in the Main menu, and then touch "Traffic On Route".

The currently set traffic information on the route appears on the screen.

- The method for checking the content displayed on the screen is the same for "Checking all traffic information".
- Checking all traffic information → Page 50

Confirming traffic information on the map



The traffic-related information displayed on the map is as follows.



(1) TRAFFIC icon

When a route has been calculated, touch to check whether there is any traffic congestion

information on your route. When no route has been calculated, touch to display the traffic list.

- When  is displayed, reading from the map disc is required. Please insert the map disc.
- When  is displayed, the data is being loaded from the map disc.

(2) A line to indicate the length of the traffic congestion



(displayed only when the scale on the map is 0.75 mile (1km) or lower).

Traffic congestions: Stop and go traffic: orange with white outline, stopped traffic: red with white outline, closed/blocked roads: black with white outline.

(3) Icon for traffic information

(appears only when the scale on the map is 10 mi (20 km) or lower)

- The traffic congestion lines to indicate the length of a traffic congestions and traffic-related icons are not displayed on city maps.
- "Selecting traffic information to display" → Page 53

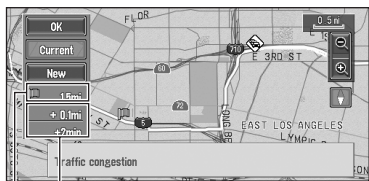
If you want to check the traffic information details, move the scroll cursor onto the , etc. and touch . This allows you to view place names and other information.

Information on avoiding traffic congestion on route ahead

If you are approaching traffic on your current route, the Navigation System has the ability to recommend an alternative route. Depending on the information of traffic congestion you have received and the setting of Use traffic flow information, the Navigation System will recommend you an alternate route automatically. On the other way, the Navigation System will detect at least 1.6 miles (2.6 km) ahead of the specific traffic incident.

If a better route can be calculated, the following screen will appear.

- Following types of traffic incidents on the route will be checked: stop and go, stopped traffic and closed/blocked roads.



Difference in distance and travel time between existing route and new route

Distance from the current position of your vehicle to the point of entry into the new route.

On this screen, you can select the following items:

New :

A new route is displayed on the screen.

Current :


The current route is displayed on the screen.

OK :

Select the route to that displayed on the screen.

- When no selection is made, the current route will be automatically selected after a short while.

When checking traffic congestion information manually

Touching  on the screen allows you to check for traffic congestion information on your route.

If there is any information about a traffic congestion on your route, a message appears asking you whether to search for another route to avoid the traffic congestion. If there is no traffic congestion information along the route being guided, it is announced on screen and by voice.

If there is a traffic congestion information on the route

When receiving information about a traffic congestion, the message announcing the presence of a traffic congestion is indicated. Voice recognition then becomes available automatically when the microphone is connected.

On this screen, you can select the following items:

Yes :

The route is recalculated taking the traffic congestion into account.

No :

The message disappears, and the map display reappears.

List :

The list with traffic information on the route is displayed.

- In the memory navi mode, you cannot touch other than **No**.

If there is no traffic congestion information on the route

If there is no traffic congestion information, the message informing that there is no traffic congestion information on the route, is shown.

On this screen, you can select the following items:

List :

The list with all traffic information is displayed.

Back :

Message disappears, and returns to the map screen.

- In Memory Navi mode, no detailed information is available for traffic information on **List**.
- If there is no traffic congestion information, the Navigation System does not automatically switch to voice recognition.

Following types of traffic incidents on the route will be checked: stop and go, stopped traffic and closed/blocked roads.

Traffic flow information

When the map scale is between 0.02 mi (25 m) – 1 mi (2 km), red, yellow, or green blinking lines may appear on either sides of a road. These colors indicate the average speed at which traffic is flowing along these streets. Here is a guide to the colors and the average speed they indicate:

RED: average speed in this area is between 0-20 mph (0-32 km/h)

YELLOW: average speed in this area is between 20-40 mph (32-64 km/h)

GREEN: average speed in this area is 40 mph (64 km/h) or faster

- In addition to these blinking lines, a round icon with a number may appear on the map. The number in the icon indicates the actual average speed of that specific area.




- You may choose to set off the use of Traffic flow information.
- Set use of Traffic flow information setting to off → Page 53

Checking traffic flow information

The traffic flow information on the route can also be displayed as an onscreen list.

1 Touch “Info/Traffic” in the Main menu, then touch “Traffic Flow”.

The list with the traffic flow information is shown.

You can use the  instead of the . The list will be sorted according to the average speed by touching the .

- The method for checking the traffic flow information displayed on the screen is the same for “Checking all traffic information”.
- Checking all traffic information → Page 50

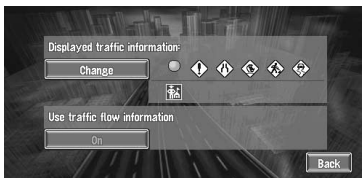
Selecting traffic information to display

There are different types of traffic information that can be received via the XM NavTraffic service, and you are able to select which types will be incorporated and displayed on your Navigation System.

1 Touch “Info/Traffic” in the Main menu, and then touch “Traffic Settings”.

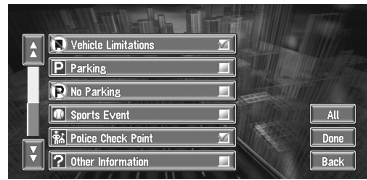
2 Touch “Change”.

The name of the displayed traffic information items, and list of icons appears on the screen.



3 Touch the traffic information item to display.

A red check appears next to the selected traffic information.



- Touching “All” selects all the traffic information.

4 Touch “Done”.

The selected traffic information icon is added to the screen.

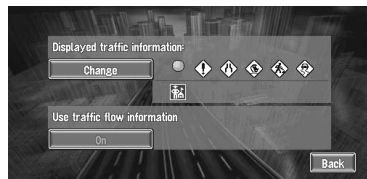
- Touch “Back” to cancel your selection.
- Traffic congestion of type stop and go, stopped traffic and closed/blocked roads cannot be deselected and are always displayed.

5 Touch “Back”

Set use of Traffic flow information setting to off

1 Touch “Info/Traffic” in the Main menu, and then touch “Traffic Settings”.

2 Touch “On”.



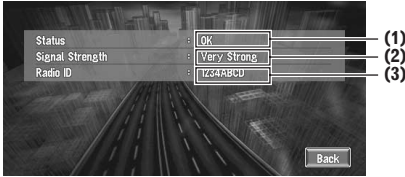
The button changes to “OFF”.

3 Touch “Back”.

- If you wish to use the traffic flow information again, touch “OFF” to turn the button “On” in the Traffic Settings screen.

Checking the reception status of the XM tuner

- 1 Touch “Info/Traffic” in the Main menu, and then touch “XM Status”.



The current XM reception status and signal strength appear on screen.

(1) Status

Depending on the XM tuner's reception status, any one of the following may appear.

- **OK**

No problem.

- **No signal**

Loss of signal.

- **Updating**

Updating encryption code.

- **Check antenna**

Improper antenna connection.

(2) Signal Strength

Depending on the signal strength, any one of the following may appear.

- **Very Good**
- **Good**
- **Marginal**
- **Weak Signal**
- **No signal**

(3) Radio ID

The radio ID appears.

Emergency Info

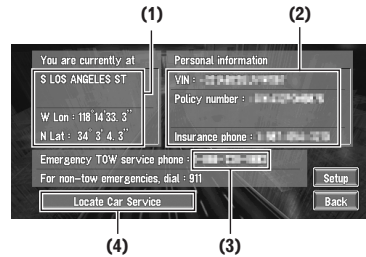
The Emergency Info screen provides important emergency information pertaining to your vehicle, insurance, and current location. Such emergency information could be useful in the event of an accident or vehicle breakdown. The accuracy of the personal information is dependent on the accuracy of the information entered into the Navigation System by the user.

⚠ WARNING

- The Emergency Info screen is only intended to provide information to a driver that may be useful during an emergency situation, and does not replace the need to call for emergency assistance, when necessary.

Checking the information registered as Emergency Info

- 1 Touch “Info/Traffic” in the Main menu, and then touch “Emergency Info”.



The information registered as **Emergency Info** appears on the screen.

(1) You are currently at:

Your current position is indicated by the street name and your latitude and longitude.

(2) Personal Information:

Your VIN number, insurance policy number, and the telephone number of your insurance company can be displayed once entered by the user.

(3) Emergency TOW service phone:

1 year of free Emergency Roadside Assistance service is available to all registered owners and provided by Signature's Nationwide Auto Club, Inc. The first year of Emergency Roadside Assistance service is paid for by Pioneer only if your Navigation System is registered with Pioneer and you sign up on-line with Nationwide Auto Club, Inc. at the time you register your Navigation System with Pioneer. If you have not signed up for this service with Nationwide Auto Club, Inc. or if your free one-year period has expired, you are subject to charges by Nationwide Auto Club, Inc. You are also subject to charges by Nationwide Auto Club, Inc. for roadside services not included in the Emergency Roadside Assistance service.

The terms and conditions regarding the Emergency Roadside Assistance service provided by Nationwide Auto Club, Inc. are determined solely and exclusively by Nationwide Auto Club, Inc. Please contact Nationwide Auto Club, Inc. for more information. The telephone number that appears here by default is the toll free number for this service. For additional details on registering for this service, please check your product registration card included with this product. If you are not interested in the free Roadside Assistance service, this number can be edited and replaced by your own roadside assistance telephone number.

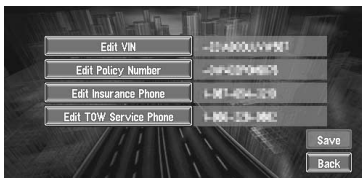
- The police number is shown as 911 and cannot be changed.

(4) Locate Car Service

▷ "Locate Car Service" → Page 56

Registering user information

- 1 Touch "Info/Traffic" in the Main menu, and then touch "Emergency Info".
- 2 Touch "Setup".
- 3 Touch "Edit VIN", "Edit Policy Number", "Edit Insurance Phone" and "Edit TOW Service Phone" to register information to each.



- If information is already registered, that information will appear.

Edit VIN

Register your Vehicle's Identification Number. Touch the texts you wish to register, then touch "OK".



The input text is deleted letter by letter from the end of the text. Continuing to press deletes all of the text.

"0-9" :

You can input text with numbers.

"Back" :

Returns you to previous screen.

Edit Policy number

Register your insurance policy number. Touch the texts you wish to register, then touch "OK".



The input text is deleted letter by letter from the end of the text. Continuing to press deletes all of the text.

"0-9" :

You can input text with numbers.

"Back" :

Returns you to previous screen.

Edit Insurance Phone

Register your insurance company's phone number. Touch the numbers you wish to register, then touch "OK".





The input text is deleted letter by letter from the end of the text. Continuing to press deletes all of the text.

“Back” :

Returns you to previous screen.

Edit TOW Service Phone

Record a towing company's phone number. Touch the numbers you wish to register, then touch “OK”.



The input text is deleted letter by letter from the end of the text. Continuing to press deletes all of the text.

“Back”:

Returns you to previous screen.

Locate Car Service

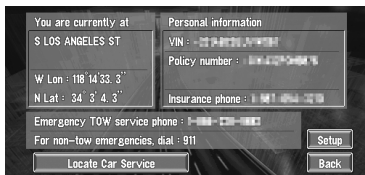
In times of emergency, you can search the Emergency Info for Auto Services in the vicinity of your current position and set the current route.

WARNING

- The Emergency Info screen is only intended to provide information to a driver that may be useful during an emergency situation and if they are in a safe location. If not, or in all major accidents, call 911.

1 Touch “Info/Traffic” in the Main menu, and then touch “Emergency Info”.

2 Touch “Locate Car Service”.



A list of auto services appears onscreen.

3 Touch the **Category of the auto service you wish to use.**

A red check appears next to the selected category.



- The Auto Service categories that can be selected in the Emergency Info are: “Automotive”, “Rental Car Agency”, and “Car Dealer”.

4 Touch “OK”.

Displays a list of names of facilities in the vicinity and the distances from your current position.

- Touching displays a list of subcategories. Touch the subcategory you wish to use from among the subcategories displayed and touch “OK” to select the Auto Service from the subcategories.

5 Touch the name of the facility to set the route you want.



Displays the route to the selected facility.

- Touch to display the location of the facility on the map.

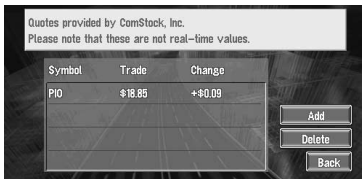
Using the XM tuner to view stock, sports, and other information

When an XM tuner (e.g., GEX-P10XMT) is connected, you can receive stock price, sports, news, and other information and display it on screen. You may also register favorite information in the Navigation System.

Displaying stock prices

Can display the prices of up to 12 stocks.

1 Touch “Info/Traffic” in the Main menu, and then touch “Stock Info”.



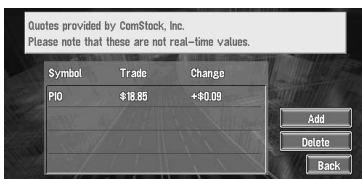
The screen displays a list of stock prices.

- ❑ The stock price information displayed onscreen is updated every 30 seconds (approx.).

Registering stocks to be displayed

1 Touch “Info/Traffic” in the Main menu, and then touch “Stock Info”.

2 Touch “Add”.



3 Input the Ticker text for the stocks you wish to display, then touch “OK”.



“Punc” :

You can input text with the punctuation such as “!”and “:”.

“Oper” :

You can input text with the operators such as “+”and “-”.

- ❑ The method for inputting the text is the same as for inputting street names.
- Text input method → Page 21

Deleting stocks to be displayed onscreen

1 Touch “Info/Traffic” in the Main menu, and then touch “Stock Info”.

2 Touch “Delete”.

3 Touch the ticker of the stock you wish to delete.



A red check appears next to the ticker you touched.

- ❑ To delete all the registered stocks, touch “All”. Red checks will appear next to all the tickers.

4 Touch “Delete”.

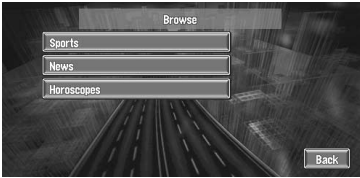
5 A message will appear asking you to confirm the deletion. Touch “OK”.

Displaying browsable information

- 1 Touch “Info/Traffic” in the Main menu, then touch “Browse”.

The screen will display a list of categories. The information appearing onscreen is automatically updated at regular intervals.

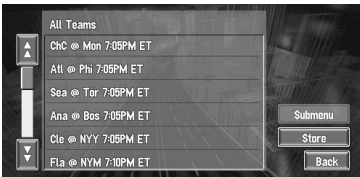
- 2 Touch a category you want to browse from the list.



- 3 Touch the topic you wish to view.



- 4 Touch an item (a topic) to display the content.



Submenu

Displays the submenu. If there is no submenu for the content, the **Submenu** will be inactive.

Store

Registers the current item (topic) about which information is displayed as a favorite.

- Confirming your favorite information → Page 58

Displaying favorite browsable Information

An XM special content can be assigned as a shortcut or “My Favorite” so that it can be accessed without having to drill down every time an update is needed. The following are the instructions on how to do so:

- 1 Touch “Info/Traffic” in the Main menu, and then touch “My Favorites”.

A list of registered items (topics) appears on the screen. Touch the item to display information about this item.



Deleting favorite browsable information

- 1 Touch “Info/Traffic” in the Main menu, and then touch “My Favorites”.

- 2 Touch “Delete”.

- 3 Touch the name of the items you wish to delete.



A red check appears next to the items you touched.

- To delete all favorite contents, touch “All”. Red checks will appear next to all the items.

- 4 Touch “Delete”.

- 5 A message will appear asking you to confirm the deletion. Touch “OK”.

Changing Background Picture

In the menu operation screen, you can indicate a picture you like on the background. Some pictures are already stored, but you can also use pictures (JPEG format data) created by a personal computer or a digital camera. If you save the pictures to a CD-R (or CD-RW), you can use them as background pictures. The following two types of background pictures can be changed:

- **AV Background** : Background for the screen during the operation of audio, or during playback.
- **Navigation Background** : Background of navigation menu screen.

Several background pictures are stored in the Pioneer DVD map disc. If you want to use these pictures, insert the Pioneer DVD map disc.

Here, a method of changing background picture is described with an example of loading the picture stored on a CD-R (-RW) onto the Navigation System as the background picture.

- When storing original pictures on a CD-R (-RW), create a folder named "**BG**" in a CD-R (-RW), and store the picture files in this folder. Up to 20 picture files can be used in the **BG** folder.
- When creating a "**Background Picture Setting**" CD-R (-RW) for changing the navigation unit background picture, make sure the total data size of the CD-R (-RW) is greater than 100MB. However, you cannot use a CD-R (-RW) containing MP3 files or the Audio data part (CD-DA session) for the "**Background Picture Setting**" function.
- Only JPEG format (".jpg" or ".JPG") pictures can be used as a background picture.
- You can only use standard characters (alphabets of both cases: A-Z, a-z) and numbers (0-9) for the file name of a background picture (international (accented) characters cannot be used).
- Pictures up to a maximum of 2048×1536 pixels can be used. We cannot guarantee a proper operation for a picture bigger than this size.
- Progressive format JPEG pictures cannot be used.

- 1** Insert a **CD-R (-RW)** to the disc loading slot.
- 2** Touch "**Settings**" in the Main menu, then touch "**System Options**".
- 3** Touch "**Background Picture Setting**".
The picture selected for each screen is indicated on the right side of "**AV Background**" and "**Navigation Background**" items.
- 4** Touch "**Navigation Background**" or "**AV Background**".



- 5** Touch "**Import from Disc**".
The list of the pictures stored in a CD-R (-RW) is displayed.
On this screen, you can select the following item:
Back to Original :
The picture when purchased is selected.
 - When a CD-R (or CD-RW) is inserted, you cannot select "**Back to Original**". When the Pioneer DVD map disc is inserted, you cannot select "**Import from Disc**".
 - In step 5, touching other than "**Import from Disc**" allows you to select a background image stored on the Pioneer DVD map disc.
- 6** Touch a picture you want for the background.
- 7** Select how to display the picture.
You can select the following items:
"Center" :
Selected picture is displayed at the center of the screen.
"Repeat" :
Selected picture is patterned, and displayed as covering the whole screen.
 - When selecting images already stored on the Pioneer DVD map disc, you cannot select the layout method for those images.

The background image starts changing. After a short while, the new background image appears.

8 Touch "Done".



On this screen, you can select the following items:

Select another Picture :

This is selected when you want to change to another picture. Return to Step 5.

Change to another background :

Select if you want to successively change the Audio Operating screen backgrounds or the Navigation backgrounds. Return to step 3.

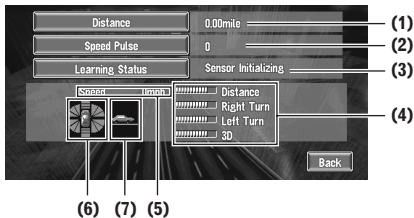
- ❑ When changing a picture starts, do not cut off the vehicle engine until the message informing the completion of changing a picture is indicated.
- ❑ When the Navigation System is reset, or the language setting is changed, the background picture may change back to the original picture. (There is also a possibility that the system will revert to the original picture for some other reason). If this happens, set the background picture again.

Checking the Navigation Status

The navigation status, including the driving status of a vehicle, positioning status by satellite, learning status of the 3D sensor, and cable connection status can be checked.

Checking sensor learning status and driving status

- 1 Touch "Settings" in the Main menu, then touch "Hardware Info".
- 2 Touch "3D Calibration".
The 3D Calibration screen appears.



(1) Distance

Driving distance is indicated.

(2) Speed Pulse

Total number of speed pulses is indicated.

(3) Learning Status

Current driving mode is indicated.

(4) Degree of learning

Sensor learning situations of distance (**Distance**), right turn (**Right Turn**), left turn (**Left Turn**), and 3D detection (**3D Detection**) are indicated by the length of bars.

- ❑ When tires have been changed or chains fitted, turning on the Speed Pulse allows the system detects the fact that the tire diameter has changed, and automatically replaces the value for calculating distance.
- ❑ If the ND-PG1 is connected, the distance calculation value cannot be replaced automatically.

(5) Speed

Speed detected by this unit is indicated. (This indication may be different from the actual speed of your vehicle, so please do not use this instead of the speedometer of your vehicle.)

(6) Acceleration or deceleration/Rotational speed

Acceleration or deceleration velocity of your vehicle is indicated. Also, rotational speed when your vehicle turns to left or right is shown.

(7) Inclination

Degree of slope of the street is indicated.

.....
To clear values...

If you want to delete the learned results stored in "**Distance**", "**Speed Pulse**" or "**Learning Status**", touch the relevant result, then touch "**Clear**".

.....

- The Navigation System can automatically use its sensor memory based on the outer dimensions of the tires.

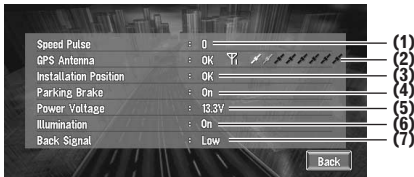
Checking the connections of leads and installation positions

Check that leads are properly connected between the navigation unit and the vehicle. Please also check whether they are connected in the correct positions.

1 Touch "Settings" in the Main menu, then touch "Hardware Info".

2 Touch "Connection Status".

The Connection Status screen appears.



(1) Speed Pulse

The Speed Pulse value detected by this unit is shown. "0" is shown while the vehicle is stationary.

(2) GPS Antenna

Indicates the connection status of the GPS antenna, the reception sensitivity, and from how many satellites the signal is received. If the signal is received correctly, "OK" is displayed. If reception is poor, "NOK" appears.

(3) Installation Position

The Installation position of the navigation unit is shown.

If installed correctly, "OK" appears. Indicates whether the Installation position of the navigation unit is correct or not. When the navigation unit is installed with an extreme angle exceeding the limitation of the installing angle, "Incorrect angle" will be displayed. When the angle of the navigation unit has been changed, "Excessive vibration" will be displayed.

(4) Parking Brake

When the parking brake is applied, "On" is displayed. When the parking brake is released, "Off" is displayed.

(5) Power Voltage

The power supply (reference value) provided from the vehicle battery to this unit is shown. If the voltage does not fall within the range of 11 to 15V, check that power cable connection is correct.

(6) Illumination

When the headlights or small lamps of a vehicle are on, "On" is displayed. (If the orange/white lead is not connected, "Off" appears.)

(7) Back Signal

When the gear lever is shifted to "R", the signal switches to "High" or "Low". (Which of these is displayed depends on the vehicle.)

Setting the Vehicle Dynamics Display

You can change the values displayed by the instruments on the left and right of the Vehicle Dynamics Display.

Until the sensor's initial learning is complete, only the voltage and clock are available.

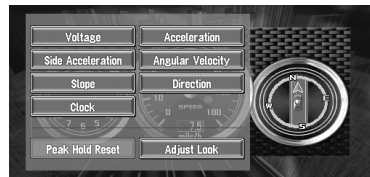
1 Switch to the Vehicle Dynamics Display.

- ▷ Changing the map display mode → Page 29

2 Touch the left or right instrument.

Touch keys are displayed.

3 Touch the items you want to display.



You can select the following items.

- **Voltage**

Displays the power supply and voltage supplied from the battery to this system.

- **Acceleration:**

Acceleration in a forward direction is displayed. The + sign indicates acceleration while the - sign indicates deceleration.

- **Side Acceleration:**

Acceleration in a side direction such as when turning, is displayed. The + sign indicates a right turn, while the - sign indicates a left turn.

- **Angular Velocity**

Displays the vehicle's turning angle over one second (how far it has turned in a second).

- **Slope**

Displays the vehicle's vertical movement. The + side represents the rising angle, and the - side the falling angle.

- **Direction:**

The direction your vehicle is traveling in is displayed.

- **Clock:**

Current time is displayed.

- **Adjust Look:**

Touch "**Adjust Look**" to display a screen for selecting the panel pattern. Touch one of the patterns from among those displayed onscreen to change the panel to the selected pattern.

- If you touch "**Peak Hold Reset**", the maximum and minimum (green line) values indicated in "**Acceleration**" and "**Side Acceleration**" are reset.
- You cannot change the speedometer at the center.
- Selecting Demo mode in the Settings menu enables you to perform a demonstration with random values.

Customizing Your Navigation System

CAUTION

- For safety reasons, these functions are not available while your vehicle is in motion. To enable these functions, you must stop in a safe place and put on the parking brake before setting your route.

Modifying the Default Settings

You can tailor default settings such as navigation functions and information display for ease of use. The following example describes how to change settings. In this example, the **"KM/Mile Setting"** settings is set to **"Mile & Yard"**.

1 Touch "Settings" in the Main menu.

The Settings menu appears.

2 Touch "System Options".

The screen changes. **"Mile"** is displayed below **"KM/Mile Setting"**, indicating that this function is currently set to **"Mile"**.

- When you touch items with a setting below them, their setting changes. When you touch items with no setting below them, a setting screen appears.
- Touching **"Back"** switch to **Settings** Menu.

3 Touch "KM/Mile Setting".



"Mile & Yard" is displayed below **"KM/Mile Setting"**, indicating that **"KM/Mile Setting"** is set to **"Mile & Yard"**.

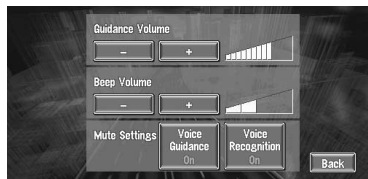
If you want to change another setting, select the item you want to change and repeat the procedure in step 3.

Items Users can Change

This section describes the details of the setting for each item. Settings marked with an asterisk (*) show that they are default or factory settings.

Volume

The sound volume for the navigation can be set. You can separately set the volume of the route guidance and of the beep sound.



Guidance volume

Touch "+" or "-" to change the Guidance volume.

Beep volume

Touch "+" or "-" to change the Beep volume.

- Volume of the audio source is adjusted by the VOLUME dial of the navigation unit.

Mute Settings

Items related to muting of sound volume can be set.

- When Voice Guidance or Voice Recognition are ON, be sure to set the **TEL/GUIDE** setting in the Audio Menu to **MUTE** or **ATT**.

• Voice Recognition

This setting controls whether the volume of the Audio source is automatically muted during voice operation.

On* :

During voice operation, the volume of the Audio source is muted automatically.

Off :

The volume of the Audio source stays the same during voice operation.

- If you select "**Off**", the sound from the Audio source may interfere with the voice recognition system.

• Voice Guidance

This setting controls whether the volume of the Audio source is automatically muted during voice guidance.

On* :

During voice guidance, the volume of the Audio source is muted automatically.

Off :

Volume of the Audio source stays the same during voice guidance.

System Options

Touch "**System Options**" in the Setting Menu to display.



Language Selection

- The language displayed can be set → Page 105

Once you change the language, installation of the program starts.

CAUTION

- **Once the installation of the program starts, do not stop the engine of your vehicle and do not switch off the Navigation System until the installation is completed and the map of your surroundings appears.**

KM/Mile Setting

This setting controls the unit of distance displayed on your Navigation System.

Mile* :

Show distances in miles.

Mile & Yard :

Show distances in miles and yards.

km :

Show distances in kilometers.

Voice Recog.Help

This setting controls the list of available voice commands displayed during voice operation.

You should set "**Voice Recog.Help**" only when the microphone of the voice recognition system (sold separately) is connected.

On* :

The list of commands is shown.

Off :

The list of commands is not shown.

Auto Voice Recognition

After you have started the engine, turn on voice recognition and set whether or not to perform all operations up to route searching by voice.

(This function is effective only when a route is not set.)

- You should set "**Auto Voice Recognition**" only when the microphone of the voice recognition system (sold separately) is connected.
- In order to operate the navigation unit by voice, you need the microphone kit (CD-VC1), which is sold separately. Before connecting the microphone, be sure to first turn the ignition switch OFF (ACC OFF). When the microphone is connected, turn the ignition switch ON (ACC ON).

On :

The automatic voice recognition is engaged each time your vehicle is started.

Off* :

Voice operation starts after touching **VOICE** icon.

Average Speed

When calculating expected time of arrival and the number of hours to the destination, set the average speed for the freeway or ordinary road using "+" and "-".

- **Minor Ordinary Road**
- When the "**KM/Mile Setting**" is set to "**Mile**" or "**Mile & Yard**", it can be set in 5 mile increments from 10 miles to 100 miles (35 miles*).
- When the "**KM/Mile Setting**" is set to "**km**", it can be set in 5 km increments from 20 km to 110 km (55 km*).
- **Major Ordinary Road**
- When the "**KM/Mile Setting**" is set to "**Mile**" or "**Mile & Yard**", it can be set in 5 mile increments from 10 miles to 120 miles (45 miles*).
- When the "**KM/Mile Setting**" is set to "**km**", it can be set in 5 km increments from 20 km to 150 km (70 km*).
- **Freeway**
- When the "**KM/Mile Setting**" is set to "**Mile**" or "**Mile & Yard**", it can be set in 5 mile increments from 30 miles to (120 miles (60 miles*).
- When the "**KM/Mile Setting**" is set to "**km**", it can be set in 5 km increments from 60 km to 150 km (85 km*).

Background Picture Setting

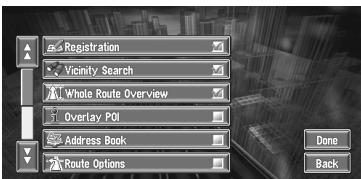
- ☞ The background picture can be changed → Page 59

Read From Disc

- ☞ Read From Disc → Page 48

Short-Cut Selection

Select shortcuts to display on the map screen. In the list displayed onscreen, the items with red checks are displayed on the map screen. Touch the shortcut you wish to display and then touch "**Done**" when a red check appears. You can select up to three shortcuts.



Registration *

Register to the Address Book information on the location indicated by the scroll cursor.

- ☞ Register to Address Book → Page 46

Vicinity Search *

Find POIs (Points Of Interest) in the vicinity of the scroll cursor.

- ☞ Searching the facilities surrounding a certain place → Page 37

Whole Route Overview *

Displays the entire currently set route.

Overlay POI

Displays on the map the mark for surrounding facilities (POI).

- ☞ Viewing POI information → Page 37

Address Book

Displays the Address Book.

- ☞ Displays the Address Book → Page 46

Route Options

Displays the **Route Options** menu.

- ☞ Displaying **Route Options** menu. → Page 38

Edit Current Route

Displays the screen for rerouting or adding or deleting way points.

- ☞ Adding or deleting way points → Page 44

Traffic On Route

Displays traffic information on the route. Use this menu for the following operations.

- Displaying a list of traffic information on the route.
- ☞ Displaying traffic information on the route → Page 51

Stock Info

Displays share prices.

- ☞ Displaying share prices → Page 57

Browse

Displays XM tuner content information.

- ☞ Displaying browsable information → Page 58

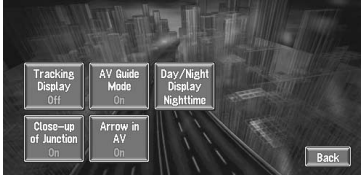
My Favorites

Displays information on your favorite item.

- ☞ Displaying browsable information → Page 58

Map Display Options

Touch "**Map Display Options**" in the Setting Menu to display.



Tracking Display

The tracking display setting has the following options.

Always :

Display tracking for all journeys.

This Trip :

Display tracking dots but erase them when the Navigation System is turned off (when turning off the engine of your vehicle).

Off* :

Do not display tracking dots.

AV Guide Mode

Setting whether or not to switch to the navigation screen automatically when your vehicle approaches a guidance point such as an intersection while displaying a screen other than navigation.

On* :

Switching from audio operation screen to navigation screen.

Off :

Screen is not switched.

Day/Night Display

To improve the visibility of the map during the evening, you can change the combination of the colors of the map.

Nighttime* :

You can change the combination of the colors of a map according to whether the vehicle lights are On or Off.

Daytime :

The map is always displayed with bright colors.

Close-up of Junction

This setting enables to switch to an enlarged map around the point where your vehicle is approaching an intersection, entrance/exit of freeway, or a junction.

On* :

Display switches to an enlarged map.

Off :

Does not switch to an enlarged map.

Arrow in AV

Set whether to display the guidance information by arrow on the Audio Operation screen.

On* :

Display guidance information by arrow on the Audio Operation screen.

Off :

Do not display guidance information by arrow on the Audio Operation screen.

Defined Locations

Touch "**Defined Locations**" in the Setting Menu to display.



Set "Home"

- Registering and changing your home location
→ Page 45

Map In Memory

The memory area is the area in the map, which is being read in advance for the memory navi mode. There are two ways of setting the memory area.



Around Current Position

An approximately 10.6 mile (17 km) square on a side with the selected location at the center is read into the memory.

Indicate the map you want to store in the memory by touching ◀, ▶, ▲ or ▼. Then, adjust the map scale to the one you desire, and touch "OK". Continuously touching ◀, ▶, ▲ or ▼ allows you to rapidly scroll the map screen.

- An area not stored in the disc cannot be memorized.

Around Current Route

Sets the surrounding currently set route to the memory area. The route to the destination will appear on screen. Please press "OK".

- The extent of the information that can be set in the memory area is about 6.6 mi (10.6 km) surrounding the route.

Set "Go to"

- Registering and changing your favorite location → Page 45

Demo Mode

This is a demonstration function for shops. After a route is set, the simulation of the route guidance to a destination is automatically displayed. Normally, set this to "Off".

On (Repeat) :

Repeat demo drive.

Off* :

Demo Mode is set off.

- If you eject the map disc during the demo drive, the demo mode will be stopped.

Time

Adjusts the systems clock. The time difference (+, -) between the time originally set in this unit is set here.

You can also select summer time On/Off.

- Time settings → Page 106

On :

Summer time is taken into account.

Off* :

Summer time is not taken into account.

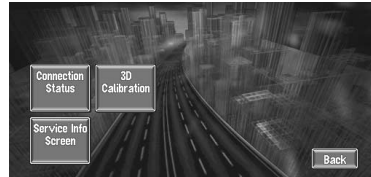
- When the period of summer time comes, or when the summer time ends, this unit does not automatically change the summer time setting.
- Change the summer time setting → Page 106

Modify Current Location

Touch the screen to adjust the current position and direction of the vehicle displayed on the map.

Hardware Info

Touch "Hardware Info" in the Setting Menu to display.



Connection Status

- Connection Status → Page 61

3D Calibration

- 3D Calibration → Page 60

Service Info Screen

Displays the disc production number and version information.

Restore Factory Settings

Reset various settings registered to the Navigation System and restores to the default or factory settings. To restore, touch "Yes".

- When you restore the settings to their status at shipping, the information set in the **Address Book, Destination History, Overlay POI, Emergency Info, Areas to Avoid, Language Selection, Time, Return Home, Go to, Modify Current Location, Background Picture Settings, Defined Locations, and Short-Cut Selection** menus are not deleted.

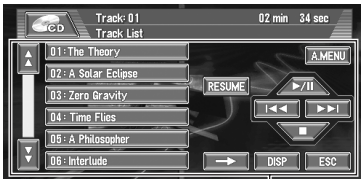
Using the AV Source (Built-in DVD Drive and Radio)

You can play a DVD-Video, CD, MP3 disc or use the radio with the navigation unit. This chapter describes how to use the audio source and the basic operation of the audio source.

Basic Operation

➤ For information on most basic operations, refer to “How to listen to a CD” → Page 24

Activating the touch panel keys

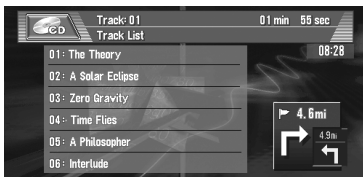
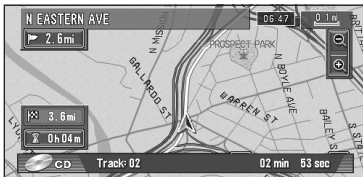


(1)

(1) Touch panel keys

Touch to do various operations.

1 Press the NAVI/AV button to switch Audio operation screen.



2 Touch the screen to activate the touch panel keys corresponding to each source.

The touch panel keys appear on the display.

To go to the next group of touch panel keys, touch →.

3 Touch “ESC” to hide the touch panel keys.

☐ If you do not use the touch panel keys for 30 seconds, they will be hidden automatically.

How to display each menu

1 Press the NAVI/AV button to switch Audio operation screen.

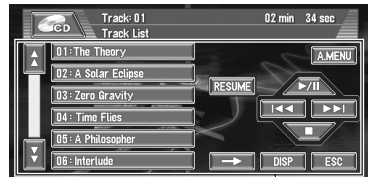


2 Select the desired source.

3 Touch the screen.

Touch keys are displayed on the screen.

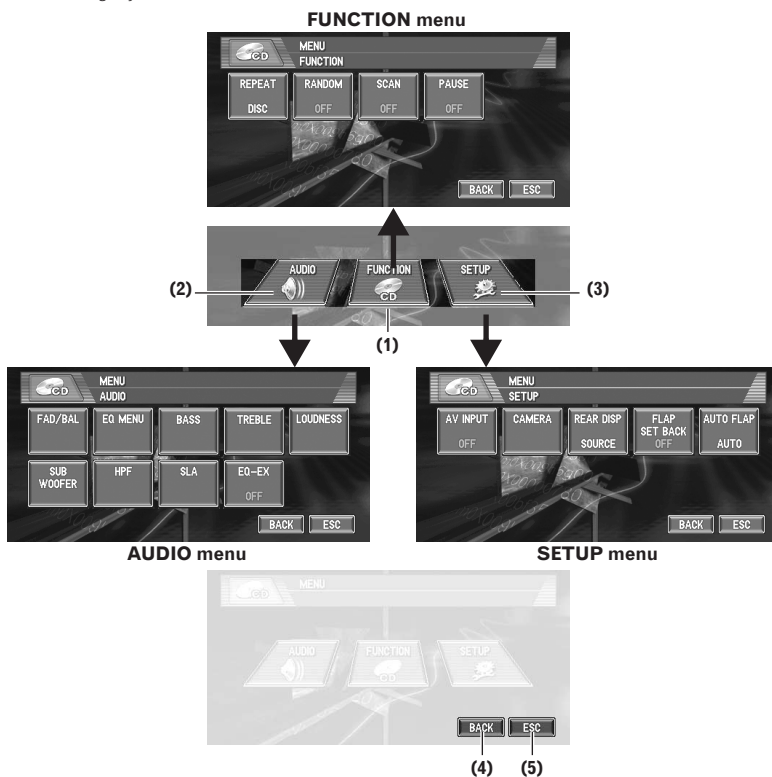
4 Touch “A.MENU” to display MENU.



Touch keys (e.g., CD)

5 Touch “AUDIO”, “FUNCTION” or “SETUP” to enter the menu you want to operate.

Each menu is displayed. The items that cannot be operated according to the sources or conditions are indicated in gray.



(1) FUNCTION key

Touch to enter the **FUNCTION** menu for each source.

- Using the **FUNCTION** menu → “Operation using the FUNCTION menu” and “Advanced <each source> operation”

(2) AUDIO key

Touch to select various sound quality controls.

- Using the **AUDIO** menu → Page 89

(3) SETUP key

Touch to select various setup functions.

- Using the **SETUP** menu → Page 96

(4) BACK key

Touch to return to the previous display.

(5) ESC key

Touch to cancel the control mode of functions.

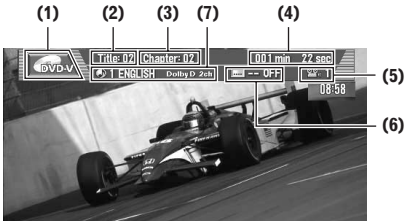
6 Touch “ESC” to return to the display of each source.

- If you do not operate the function within about 30 seconds, the display is automatically returned to the playback display.

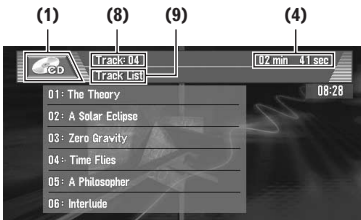
Operating the Built-in DVD drive

You can play a DVD-Video, CD or MP3 disc using the built-in DVD drive of the navigation unit. This section describes common operations for these media.

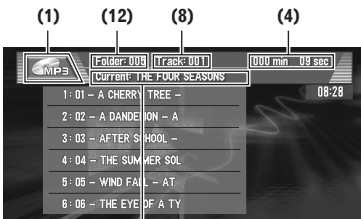
DVD-Video



CD



MP3



(11)



(10)

➤ More advanced DVD-Video operation → Page 75

☐ Pressing the **DISP** button changes the screen display.

➤ Switching screen display → Page 98

(1) Source icon

Shows which source has been selected.

(2) Title number indicator

Shows the title currently playing.

(3) Chapter number indicator

Shows the chapter currently playing.

(4) Play time indicator

Shows the elapsed playing time of the current chapter (track, or file).

(5) Viewing angle indicator

Shows what viewing angle has been selected.

(6) Subtitle language indicator

Shows what subtitle language has been selected.

(7) Audio language indicator

Shows what audio language and audio system have been selected.

(8) Track number indicator

Shows the track currently playing.

(9) Disc information indicator

Shows the information of the currently playing disc.

➤ Switching screen display → Page 99

(10) Repeat indicator

Shows the selected repeat range.

(11) Current folder name indicator

Shows the folder name currently playing.

(12) Folder number indicator

Shows the folder number currently playing.

☐ When playing discs with MP3 files and audio data (CD-DA) such as CD-EXTRA and MIXED-MODE CDs, both types can be played only by switching mode between MP3 and CD-DA by touching "DA.MP3" or pressing **BAND** button.

☐ If you have switched between playback of MP3 files and audio data (CD-DA), playback starts at the first track on the disc.

☐ This built-in DVD drive can play back an MP3 file recorded on CD-ROM.

➤ Common operation of the **DISC** sources → Page 72

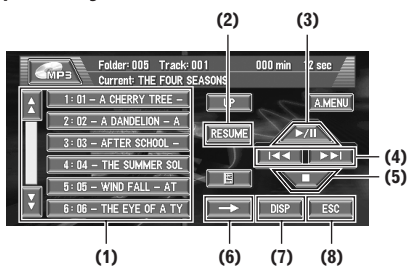
- ❑ There is sometimes a delay between starting up playback and the sound being issued. This is particularly the case when playing back multi-session and many folders. When being read in, **Reading Format** is displayed.
- ❑ Playback is carried out in order of file number. Folders are skipped if they contain no files. (If folder 001 (ROOT) contains no files, playback commences with folder 002.)
- ❑ When playing back files recorded as VBR (variable bit rate) files, the play time will not be correctly displayed if fast forward or reverse operations are used.
- ❑ If more than 193 tracks are stored in the folder, some time may be required to display the track list.

Touch key operation

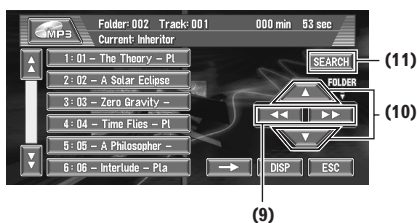
1 Touch the source icon and then touch "DISC" to select the built-in DVD drive.

When the source icon is not displayed, you can display it by touching the screen. If no disc is loaded in navigation unit, you can not select "DISC" (built-in DVD drive).
 ➔ Insert a disc in navigation unit → Page 24

2 Touch the screen to display the touch panel keys.



Touch keys (e.g., MP3, Page 1)



Touch keys (e.g., MP3, Page 2)

(1) Selecting tracks or folders from the list

The list lets you see the list of track titles or folder names on a disc and select one of them to playback.

- ❑ If a folder list or a track list is not displayed, touch "DISP".
- ❑ Touching Δ or ∇ switches to the next or previous page in the list.
- ❑ A list will not be displayed when using DVD-Video.
- ❑ In the case of normal CDs, no title information is recorded. Accordingly, the display shows "-".

(2) Using the resume function.

When a disc is removed, the playback location of the disc is automatically memorized. If you insert the disc again and touch "RESUME", playback of a disc resumes at the same point you stopped previously.

- **DVD:** Playback resumes from the point in time when the disc was removed.
- **CD, MP3:** Playback resumes from the beginning of the last track that played when the disc was removed previously.
- ❑ If you touch and hold "RESUME" in playback, the location will be recorded. When you touched "RESUME" again, playback resumes from the recorded location.
- ❑ For CD/MP3 discs and DVD-Video, one replay position each can be recorded.
- ❑ To delete the recorded position, touch and hold "RESUME" with the disc stopped.
- ❑ No replay position can be recorded for mixed mode CDs such as those containing MP3 files and audio data (CD-DA) and for discs using a special recording method.

- Some replay positions cannot be recorded. This will depend on the playback position.

(3) Playback and Pause

Pause lets you temporarily stop disc playback. Touching **▶/||** switches between "playback" and "pause".

- **DVD:** The icon **||** is displayed for four seconds and playback is paused letting you view a still image.
- Depending on the disc and the playback location on the disc, the icon **⊗** may be displayed indicating that still playback is not possible.
- **CD, MP3:** The **PAUSE** is displayed for and playback is paused.

(4) DVD:Skip the chapter forward or backward

Touching **▶▶** skips to the start of the next chapter. Touching **◀◀** once skips to the start of the current chapter. Touching again will skip to the previous chapter.

- You can also skip back or forward to another chapter by moving the joystick left or right.

CD, MP3:Skip the track forward or backward

Touching **▶▶** skips to the start of the next track. Touching **◀◀** once skips to the start of the current track. Touching again will skip to the previous track.

- You can also skip back or forward to another track by moving the joystick left or right.

(5) Using to stop playback

- **DVD:** When you stop DVD playback by touching **■**, that location on the disc is memorized enabling playback from that point when you play the disc again.
- **CD, MP3:** When you stop CD playback by touching **■**, that track number on the disc is memorized enabling playback from that track when you play the disc again.
- To play the disc again, touch **▶/||**.

(6) Switching next page of touch keys

(7) Switching the screen display

- Switching screen display → Page 98

(8) Disappear the touch keys

(9) Fast forward or backward

Keep touching **◀◀** or **▶▶** to perform fast forward or backward.

- **DVD:** If you keep touching **◀◀** or **▶▶** for five seconds, the icon **◀◀** or **▶▶** changes into **◀◀◀** or **▶▶▶**. When this happens, fast reverse/fast forward continues even if you release **◀◀** or **▶▶**. To resume playback at a desired point, touch **▶/||**.
- Fast forward/fast reverse may not be possible at certain locations on some discs. If this happens, normal playback automatically resumes.
- You can also perform fast reverse/fast forward by holding the joystick left or right.
- **CD, MP3:** There is no sound on fast forward or reverse. This is fast forward and backward operation only for the file being played. This operation is canceled when the previous or next file is reached.

(10) DVD:Skip the title forward or backward

Touching **▲** skips to the start of the next title. Touching **▼** skips to the start of the previous title.

- You can also skip back or forward to another title by moving the joystick up or down.

MP3: Using the folder up or down

To return to folder 001 (ROOT), press and hold **BAND** button. However, if folder 001 (ROOT) contains no files, playback commences with folder 002.

You cannot select a folder that does not have an MP3 file recorded in it.

- You can also skip back or forward to another folder by moving the joystick up or down.
- When playing discs with MP3 files and audio data (CD-DA), you cannot use **BAND** button to return folder 001 (ROOT).

(11) DVD:Searching for a desired scene, starting playback from a specified time. (Refer to page 76)

CD, MP3:Searching for a desired track

You can use the search function to specify a track to search for a desired track.

Touch 0 — 9 to input the desired number.

- To select 3, touch 3.
 - To select 10, touch 1 and 0 in order.
 - To select 23, touch 2 and 3 in order.
- To cancel the input numbers, touch **"CLEAR"**.

While the input number is displayed, touch "ENTER".

This starts playback from the selected track.

(MP3) Switching mode between MP3 and CD-DA

When playing discs with MP3 files and audio data (CD-DA) such as CD-EXTRA and MIXED-MODE CDs, both types can be played only by switching mode between MP3 and CD-DA.

1 Touch "DA.MP3".

- You can also press the **BAND** button to switch between MP3 and CD-DA.

(MP3) Moving to upper folders

In the case of an MP3 disc in which the data is divided into folders, you can move a track to upper folders. This is used to playback tracks recorded in other folders.

1 Touch "UP".

- If the current folder is the **ROOT** folder, **"UP"** is displayed in gray.

(MP3) Displaying text information on MP3 disc

Text information recorded on a MP3 disc can be displayed.

1 Touch .

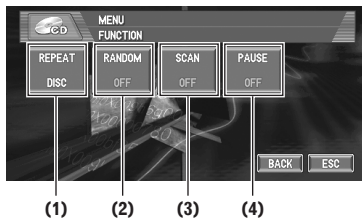
The next piece of information is displayed.

- **Disc Title** (disc title)
- **Track Title** (track title)
- **Folder Title** (folder name)
- **File Name** (file name)
- **Artist Name** (artist name)
- **Genre** (genre)
- **Year** (year)

If specific information has not been recorded on MP3 files on disc, nothing may be displayed.

Operation using the FUNCTION menu

- How to display the **FUNCTION** menu → Page 69



FUNCTION menu (e.g., CD)

- "RANDOM"** and **"SCAN"** cannot be used during a DVD-Video playback.

(1) Repeating play

Each touch of the **"REPEAT"** changes the settings as follows:

DVD :

- **TITLE** — Repeat just the current title
 - **CHAPTER** — Repeat just the current chapter
 - **OFF** — Play throughout the current disc
- If you perform chapter (title) search or fast forward/reverse, or slow motion playback the repeat play range changes to **"OFF"**.

CD :

- **DISC** — Repeat the current disc
 - **TRACK** — Repeat just the current track
- If you perform track search or fast forward/reverse, repeat play is automatically canceled.
 - When playing discs with MP3 files and audio data (CD-DA), repeat play performs within the each data session even if **DISC** is selected.

MP3 :

- **FOLDER** — Repeat the current folder
 - **DISC** — Repeat all tracks
 - **TRACK** — Repeat just the current track
- If you select another folder during repeat play, the repeat play range changes to **DISC**.
 - If you perform track search or fast forward/reverse during **TRACK**, the repeat play range changes to **DISC**.
 - When **FOLDER** is selected, it is not possible to play back a subfolder of that folder.

- When playing discs with MP3 files and audio data (CD-DA), repeat play performs within the currently playing data type even if **DISC** is selected.

(2) Playing tracks in a random order

Touching "**RANDOM**" switches between "**ON**" and "**OFF**". In the case of MP3, the selected tracks in the repeated range are randomly played.

(3) CD: Scanning tracks of a CD

Touching "**SCAN**" switches between "**ON**" and "**OFF**". Scan play lets you hear the first 10 seconds of each track on the CD. When you find the desired track touch "**SCAN**" to turn scan play off.

- After scanning of a CD is finished, normal playback of the tracks will begin again.

MP3: Scanning folders and tracks

Touching "**SCAN**" switches between "**ON**" and "**OFF**". Scan play takes place for the selected tracks in the repeat range. When you find the desired track touch "**SCAN**" to turn scan play off.

- After track or folder scanning is finished, normal playback of the tracks will begin again.

(4) Pausing disc playback

Touching "**PAUSE**" switches between "**ON**" and "**OFF**".

Other DVD-Video function

When playing the DVD-Video, you can also use the following functions.

Operating the DVD menu

Some DVDs allow you to select the disc contents using a menu.

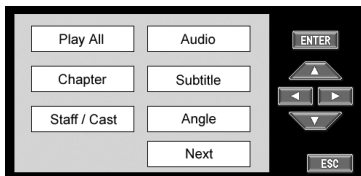
- You can display the menu by touching "**MENU**" or "**TOP.M**" while a disc is playing. Touching either of these keys again lets you start playback from the location selected from the menu. For details, refer to the instructions provided with the disc.

1 Touch the screen to display to touch panel keys.

2 Touch → to display ⇐⇒.

3 Touch ⇐⇒ to display touch panel keys to operate the DVD menu.

4 Touch ▲, ▼, ◀ or ▶ to select the desired menu item.



5 Touch "ENTER".

Playback starts from the selected menu item. The way to display the menu differs depending on the disc.

Frame-by-frame playback

This lets you move ahead one frame at a time during playback.

1 Touch II▶ during playback.

Each time you touch II▶, you move ahead one frame.

To return to normal playback, touch ▶/II.

- Depending on the disc and the playback location on the disc, the icon Ⓞ may be displayed indicating that frame-by-frame playback is not possible.
- With some discs, images may be unclear during frame-by-frame playback.

Slow motion playback

This lets you slow down playback speed.

1 Keep touching II▶ until ◻▶ is displayed during playback.

The icon ◻▶ is displayed, forward slow motion playback begins.

To return to normal playback, touch ▶/II.

- There is no sound during slow motion playback.
- Depending on the disc and the playback location on the disc, the icon Ⓞ may be displayed indicating that slow motion playback is not possible.

- With some discs, images may be unclear during slow motion playback.
- Reverse slow motion playback is not possible.

Searching for a desired scene, starting playback from a specified time

You can use the search function to search for a desired scene by specifying a title or chapter, and the time search function to specify the time on a disc at which play starts.

- Chapter search and time search are not possible when disc playback has been stopped.

- 1 Touch "SEARCH" and then touch "TITLE" (title), "CHAP" (chapter) or "TIME" (time).**
- 2 Touch 0 — 9 to input the desired number. For titles and chapters**

- To select 3, touch 3.
- To select 10, touch 1 and 0 in order.
- To select 23, touch 2 and 3 in order.


For time (time search)

- To select 21 minutes 43 seconds, touch 2, 1, 4 and 3 in order.
- To select 1 hour 11 minutes, convert the time into 71 minutes 00 seconds and touch 7, 1, 0 and 0 in order.

To cancel the input numbers, touch **"CLEAR"**.

- 3 While the input number is displayed, touch "ENTER".**


This starts playback from the selected scene.

- With discs featuring a menu, you can also touch **"MENU"** or **"TOP.M"** and then make selections from the displayed menu.
- With some discs, the icon  may be displayed, indicating that titles, chapters and time cannot be specified.

Changing audio language during playback (Multi-audio)

DVDs can provide audio playback with different languages and different systems (Dolby Digital, DTS etc.). With DVDs featuring multi-audio recordings, you can switch between languages/audio systems during playback.

- 1 Touch "AUDIO" during playback.** Each time you touch **"AUDIO"** switches between audio mode.


- The number in the  mark on a DVD's package indicates the number of recorded languages/audio systems.
- With some DVDs, switching between languages/audio systems may only be possible using a menu display.
- Only digital output of DTS audio is possible. If navigation unit's optical digital outputs are not connected, DTS audio will not be output, so select an audio setting other than DTS.
- Display indications such as Dolby D and 5.1ch indicate the audio system recorded on the DVD. Depending on the setting, playback may not be with the same audio system as that indicated.
- Touching **"AUDIO"** during fast forward/fast reverse, pause or slow motion playback returns you to normal playback.

Changing the subtitle language during playback (Multi-subtitle)

With DVDs featuring multi-subtitle recordings, you can switch between subtitle languages during playback.


- 1 Touch "SUB.T" during playback.**

Each time you touch **"SUB.T"** switches between subtitle language.

- The number in the  mark on a DVD's package indicates the number of recorded subtitle languages.
- With some DVDs, switching between subtitle languages may only be possible using a menu display.
- Touching **"SUB.T"** during fast forward/fast reverse, pause or slow motion playback returns you to normal playback.



Changing the viewing angle during playback (Multi-angle)

With DVDs featuring multi-angle (scenes shot from multiple angles) recordings, you can switch among viewing angles during playback.

- During playback of a scene shot from multiple angles, the angle icon  is displayed. Turn angle icon display on or off using **DVD SETUP** menu.
- Setting angle icon → Page 93

1 Touch "ANGLE" during playback of a scene shot from multiple angles.

Each time you touch "**ANGLE**" switches between angle.

- ❑ The  mark on a DVD's package indicates it features multi-angle scenes. The number in the  mark indicates the number of angles from which scenes were shot.
- ❑ Touching "**ANGLE**" during fast forward/fast reverse, pause or slow motion playback returns you to normal playback.

(3) Preset number indicator

Shows what preset has been selected.

(4) Frequency indicator

Shows to which frequency the tuner is tuned.

(5) Preset list display

Shows the preset list.

(6) LOCAL indicator

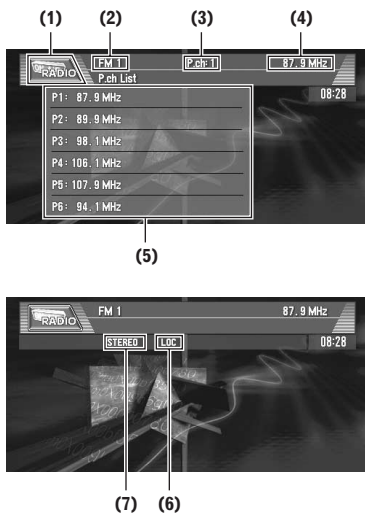
Shows when local seek tuning is on.

(7) STEREO indicator

Shows that the frequency selected is being broadcast in stereo.

Radio

Listening to the radio



These are the basic steps necessary to operate the radio.

➤ More advanced radio operation → Page 78

❑ Pressing the **DISP** button changes the screen display.

➤ Switching screen display → Page 98

(1) Source icon

Shows which source has been selected.

(2) Band indicator

Shows which band the radio is tuned to AM or FM.

1 Touch the source icon and then touch "RADIO" to select the radio.

2 Touch the screen to display the touch panel keys.

3 Touch "BAND" to select a band.

Touch "**BAND**" repeatedly until the desired band is displayed, FM1, FM2, FM3 for FM or AM.

4 To perform manual tuning, touch ◀ or ▶ briefly.

The frequencies move up or down step by step.

You can also perform manual tuning by moving the joystick left or right.

5 To perform seek tuning, keep touching ◀ or ▶ for about one second and release.

The tuner will scan the frequencies until a broadcast strong enough for good reception is found.

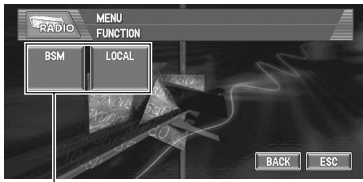
You can cancel seek tuning by touching either ◀ or ▶ briefly.

If you keep touching ◀ or ▶ you can skip broadcasting stations. Seek tuning starts as soon as you release the keys.

You can also perform seek tuning by holding the joystick left or right.

❑ If you do not use the touch panel keys for 30 seconds, they will be hidden automatically.

Advanced radio operation



(1)

(1) Function display

Shows the function names.

- How to display the **FUNCTION** menu → Page 69

Storing and recalling broadcast frequencies

If you touch any of the preset tuning keys **P1** (PRESET 1) — **P6** (PRESET 6) you can easily store up to six broadcast frequencies for later recall with the touch of a key.



Preset tuning keys (P1 — P6)

1 When you find a frequency that you want to store in memory keep touching a preset tuning key P1 — P6 until the preset number (e.g., P.ch: 1) stops flashing.

The number you have touched will flash in the preset number indicator and then remain lit. The selected radio station frequency has been stored in memory.

2 The next time you touch the same preset tuning key P1 — P6 the radio station frequency is recalled from memory.

When the touch panel keys are not displayed, you can display them by touching the screen. When **P1** — **P6** are not displayed, you can display them by touching **DISP**.

- ☐ Up to 18 FM stations, 6 for each of the three FM bands, and 6 AM stations can be stored in memory.

- ☐ You can also use **▲** and **▼** to recall radio station frequencies assigned to preset tuning keys **P1** — **P6**.

Tuning in strong signals

Local seek tuning lets you tune in only those radio stations with sufficiently strong signals for good reception.

1 Touch “LOCAL” in the FUNCTION menu.

2 Touch “ON” to turn local seek tuning on.

To turn local seek tuning off, touch “LOCAL”.

3 Touch ◀ or ▶ to set the sensitivity.

There are four levels of sensitivity for FM and two levels for AM:

FM: 1 — 2 — 3 — 4

AM: 1 — 2

The 4 setting allows reception of only the strongest stations, while lower settings let you receive progressively weaker stations.

Storing the strongest broadcast frequencies

BSM (best stations memory) lets you automatically store the six strongest broadcast frequencies under preset tuning keys **P1** — **P6** and once stored there you can tune in to those frequencies with the touch of a key.

1 Touch “BSM” in the FUNCTION menu.

2 Touch “START” to turn BSM on.

BSM begins to flash. While **BSM** is flashing the six strongest broadcast frequencies will be stored under preset tuning keys **P1** — **P6** in order of their signal strength. When finished, **BSM** stops flashing.

To cancel the storage process, touch **STOP**.

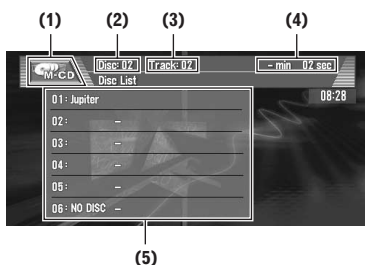
- ☐ Storing broadcast frequencies with **BSM** may replace broadcast frequencies you have saved using **P1** — **P6**.

Using the AV Source (Pioneer AV Equipments)

When Pioneer audio equipment is connected to the Navigation System using IP-BUS or AV-BUS, such equipment can be operated from the navigation unit. This chapter describes the operation of the audio source that can be used when the Pioneer audio equipment is connected. When reading this chapter, please also refer to the operation manual of the AV equipment connected to the Navigation System.

Multi-CD Player

Listening a CD



You can use navigation unit to control a multi-CD player, which is sold separately. These are the basic steps necessary to play a CD with your multi-CD player.

➤ More advanced **M-CD** operation → Page 80

☐ Pressing the **DISP** button changes the screen display.

➤ Switching screen display → Page 98

(1) Source icon

Shows which source has been selected.

(2) Disc number indicator

Shows the disc currently playing.

(3) Track number indicator

Shows the track currently playing.

(4) Play time indicator

Shows the elapsed playing time of the current track.

(5) Disc list display

Shows the disc title list.

1 Touch the source icon and then touch “M-CD” to select the multi-CD player.

2 Touch the screen to display the touch panel keys.

3 Touch any of 01 — 06 to select a disc you want to listen to.

If you want to select a disc located at 7 to 12, touch or to display **07 — 12**.

When **01 — 06** and **07 — 12** are not displayed, you can display them by touching “**DISP**”.

You can also sequentially select a disc by touching or or moving the joystick up or down.

4 To skip back or forward to another track, touch or .

Touching skips to the start of the next track. Touching once skips to the start of the current track. Touching again will skip to the previous track.

You can also skip back or forward to another track by moving the joystick left or right.

5 To perform fast forward or reverse, keep touching or .

You can also perform fast reverse/fast forward by holding the joystick left or right.

☐ When the multi-CD player has performed the preparatory operations, **READY** is displayed.

☐ If the multi-CD player does not operate properly, an error message such as **ERROR-11** may be displayed. Refer to the multi-CD player owner's manual.

☐ If there are no discs in the multi-CD player magazine, **NO DISC** is displayed.

50-disc multi-CD player

Only those functions described in this manual are supported for 50-disc multi-CD players.

(But this unit can perform the disc list display up to Disc 12 with a 50-disc multi-CD player.)

Advanced multi-CD player operation



(1)

(1) Function display

Shows the function names.

- How to display the **FUNCTION** menu → Page 69

Repeating play

There are three repeat play ranges for the multi-CD player: **M-CD** (multi-CD player repeat), **TRACK** (one-track repeat) and **DISC** (disc repeat).

1 Touch "REPEAT" in the FUNCTION menu.

Each touch of the "REPEAT" changes the settings as follows:

- **M-CD** — Repeat all discs in the multi-CD player
- **TRACK** — Repeat just the current track
- **DISC** — Repeat the current disc
- If you select other discs during repeat play, the repeat play range changes to **M-CD**.
- If you perform track search or fast forward/reverse during **TRACK**, the repeat play range changes to **DISC**.

Playing tracks in a random order

Random play lets you play back tracks in a random order within the repeat range, **M-CD** and **DISC**.

1 Select the repeat range.

- Repeating play → Page 80

2 Touch "RANDOM" in the FUNCTION menu.

Touching "RANDOM" switches between "ON" and "OFF".

Tracks will play in a random order within the previously selected **M-CD** or **DISC** ranges.

Scanning CDs and tracks

When the repeat play range is set to **DISC**, the beginning of each track on the selected disc plays for about 10 seconds. When the repeat play range is set to **M-CD**, the beginning of the first track of each disc is played for about 10 seconds.

1 Select the repeat range.

- Repeating play → Page 80

2 Touch "SCAN" in the FUNCTION menu.

Touching "SCAN" switches between "ON" and "OFF".

The first 10 seconds of each track of the current disc (or the first track of each disc) is played.

3 When you find the desired track (or disc) touch "SCAN" to turn scan play off.

- After track or disc scanning is finished, normal playback of the tracks will begin again.

Pausing CD playback

Pause lets you temporarily stop disc playback.

1 Touch "PAUSE" in the FUNCTION menu.

Touching "PAUSE" switches between "ON" and "OFF".

Play of the current track pauses.

Using ITS playlists

ITS (instant track selection) lets you make a playlist of favorite tracks from those in the multi-CD player magazine. After you have added your favorite tracks to the playlist you can turn on ITS play and play just those selections.

Creating a playlist with ITS programming

You can use ITS to enter and playback up to 99 tracks per disc, for up to 100 discs (with the disc title). (With multi-CD players sold before the CDX-P1250 and CDX-P650, up to 24 tracks can be stored in the playlist.)

1 Play a CD that you want to program.

▷ How to select a CD → Page 79

2 Touch “ITS MEMORY” in the FUNCTION menu.**3 Touch ◀ or ▶ to select a track you want to memorize.****4 Touch “MEMORY” to store the currently playing track in the playlist.**

MEMORY is displayed briefly and the currently playing selection is added to your ITS playlist.

Touching “**CLEAR**” will delete all the tracks recorded in the ITS playlist.

- After data for 100 discs has been stored in memory, data for a new disc will overwrite the oldest one.

Playback from your ITS playlist

ITS play lets you listen to the tracks that you have entered into your ITS playlist. When you turn on ITS play, tracks from your ITS playlist in the multi-CD player will begin to play.

1 Select the repeat range.

▷ Repeating play → Page 80

2 Touch “ITS PLAY” in the FUNCTION menu.

Touching “**ITS PLAY**” switches between “**ON**” and “**OFF**”.

Playback begins of those tracks from your playlist within the previously selected **M-CD** or **DISC** ranges.

If no tracks in the current range are programmed for ITS play then **ITS EMPTY** is displayed.

To turn ITS play off, touch “**ITS PLAY**”.

Erasing a track from your ITS playlist

When you want to delete a track from your ITS playlist, you can if ITS play is on.

If ITS play is already on, skip to step 2.

1 Play a CD you want to delete a track from your ITS playlist, and turn ITS play on.

▷ Playback from your ITS playlist → Page 81

2 Touch “ITS MEMORY” in the FUNCTION menu.**3 Touch ◀ or ▶ to select a track you want to erase.****4 Touch “CLEAR” to erase a selected track from your ITS playlist.**

The currently playing selection is erased from your ITS playlist and playback of the next track from your ITS playlist begins.

If there are no tracks from your playlist in the current range, **ITS EMPTY** is displayed and normal play resumes.

Erasing a CD from your ITS playlist

When you want to delete all tracks of a CD from your ITS playlist, you can if ITS play is off.

1 Play a CD that you want to delete.

▷ How to select a CD → Page 79

2 Touch “ITS MEMORY” in the FUNCTION menu.**3 Touch “CLEAR” to erase all tracks on the currently playing CD from your ITS playlist.**

All tracks on the currently playing CD are erased from your playlist and **ALL CLEAR** is displayed.

Using CD TEXT functions

You can use these functions only with a CD TEXT compatible multi-CD player.

Some discs have certain information encoded on the disc during manufacture. These discs may contain such information as the CD title, track title, artist's name and playback time and are called CD TEXT discs. Only these specially encoded CD TEXT discs support the functions listed below.

Displaying titles on CD TEXT discs

▷ Switching screen display → Page 98

Selecting tracks from the track title list

Track title list lets you see the list of track titles on a CD TEXT disc and select one of them to play-back.

- 1 Touch **"TRACK LIST"** in the **FUNCTION** menu.
- 2 Touch \blacktriangle or \blacktriangledown to switch between the lists of titles.
- 3 Touch the track title in the list.
That selection will begin to play.

Using compression and bass emphasis

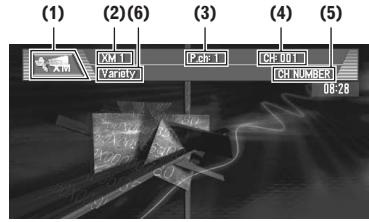
You can use these functions only with a multi-CD player that supports them.

Using **COMP** (compression) and **DBE** (dynamic bass emphasis) functions lets you adjust the sound playback quality of the multi-CD player. Each of the functions has a two-step adjustment. The COMP function balances the output of louder and softer sounds at higher volumes. DBE boosts bass levels to give playback a fuller sound. Listen to each of the effects as you select through them and use the one that best enhances the playback of the track or CD that you are listening to.

- 1 Touch **"COMP"** in the **FUNCTION** menu.
If the multi-CD player does not support **COMP/DBE**, **NO COMP** is displayed and you cannot select the function.
Touch **COMP** repeatedly to switch between the following settings:
OFF — COMP 1 — COMP 2 — OFF — DBE 1 — DBE 2

XM Tuner

Listening to the XM



You can use navigation unit to control a XM satellite digital tuner (e.g. GEX-P10XMT), which is sold separately.

For details concerning operation, refer to the XM tuner's operation manuals. This section provides information on XM operations with navigation unit which differs from that described in the XM tuner's operation manual.

- This Navigation System does not have the text scroll function.
 - With the Navigation System, you can operate one additional function: XM channel direct selection.
- Pressing the **DISP** button changes the screen display.
- \curvearrowright Switching screen display \rightarrow Page 98

(1) Source icon

Shows which source has been selected.

(2) XM band indicator

Shows the XM band which has been selected.

(3) XM preset number indicator

Shows what XM preset has been selected.

(4) XM channel number indicator

Shows to which XM channel number the tuner is tuned.

(5) XM channel select setting indicator

Shows what channel select setting has been selected. CH Number is displayed when **CH NUMBER** is selected, and Category is displayed when **CATEGORY** is selected.

(6) XM channel name

Shows the channel name of broadcast channel.

1 Touch the source icon and then touch “XM” to select the XM.

2 Touch the screen to display the touch panel keys.

3 Touch “BAND” to select a XM band.
Touch “**BAND**” repeatedly until the desired XM band is displayed, XM1, XM2 or XM3.

4 To perform tuning, touch ◀ or ▶.
The channels move up or down step by step. Channels that cannot currently be selected are skipped, and the next channel is selected. If you keep touching ◀ or ▶, you can increase or decrease channel number continuously. You can also perform manual tuning by moving the joystick left or right. You can also perform tuning from a desired channel category.

- ▷ Selecting the channel in the channel category → Page 83

Switching the XM display

- ▷ Switching screen display → Page 98

Storing and recalling broadcast stations

If you touch any of the preset tuning keys **P1** — **P6** you can easily store up to six broadcast stations for later recall with the touch of a key.

1 When you find a station that you want to store in memory keep touching a preset tuning key P1 — P6 until the XM preset number (e.g., P.ch: 1) stops flashing.

The number you have touched will flash in the XM preset number indicator and then remain lit. The selected station has been stored in memory.

The next time you touch the same preset tuning key **P1** — **P6** the station is recalled from memory.

When the touch panel keys are not displayed, you can display them by touching the screen. When **P1** — **P6** are not displayed, you can display them by touching →.

- Up to 18 stations, 6 for each of three XM bands can be stored in memory.

- You can also use ▲ and ▼ to recall stations assigned to preset tuning keys **P1** — **P6**.

Switching the XM channel select setting

You can switch if you select a channel with a channel number or from a channel category when you select a channel.

- 1 Touch “MODE” to select the desired channel select setting.**
- 2 Touch “MODE” repeatedly to switch between the following channel select settings:**
CH NUMBER (channel number select setting) — **CATEGORY** (channel category select setting)

Selecting the channel in the channel category

- 1 Touch “MODE” to select the channel category select setting.**
- 2 Touch “MODE” repeatedly to switch between the following channel select settings:**
CH NUMBER (channel number select setting) — **CATEGORY** (channel category select setting)
- 3 Touch ▲ or ▼ to select the desired channel category.**
- 4 Touch ◀ or ▶ to select the desired channel in the selected channel category.**

Selecting the XM channel directly

You can select the XM channel directly by entering the desired channel number.

- 1 Touch “DIRECT”.**
CHANNEL INPUT appears in the display.
- 2 Touch 0 — 9 to input the desired channel number.**
To cancel the input numbers, touch “**CLEAR**”.

3 While the input number is displayed, touch "ENTER".

The entered XM channel is selected.

Display the ID code

Channel number select setting

If you select CH : 000, the ID code is displayed.

1 Touch ◀ or ▶ to select "CH : 000".

Channel category select setting

RADIO ID is provided as a channel category for displaying the ID code.

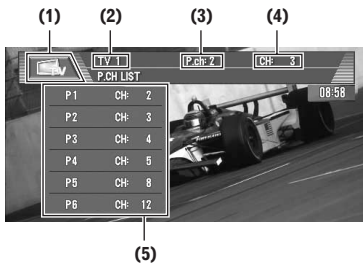
1 Touch ▲ or ▼ to select "RADIO ID" from channel category.

If you select another channel, display of the ID code is canceled.

Display of the ID code repeats displaying RADIO ID and the ID code one after the other.

TV Tuner

Watching the TV tuner



You can use the Navigation System to control a TV tuner, which is sold separately. For details concerning operation, refer to the TV tuner's operation manual. This section provides information on TV operations with navigation unit that differ from those described in the TV tuner's operation manual.

- Pressing the **DISP** button changes the screen display.
- ▷ Switching screen display → Page 98

(1) Source icon

Shows which source has been selected.

(2) Band indicator

Shows which band the TV tuner is tuned to.

(3) Preset number indicator

Shows which preset has been selected.

(4) Channel indicator

Shows which channel the TV tuner is tuned.

(5) Preset list display

Shows the preset list.

1 Touch the source icon and then touch "TV" to select the TV.

2 Touch the screen to display the touch panel keys.

3 Touch "BAND" to select a band.

Touch "BAND" repeatedly until the desired band is displayed, TV1 or TV2.

4 To perform manual tuning, touch ◀ or ▶ briefly.

The channels move up or down step by step. You can also perform manual tuning by moving the joystick left or right.

5 To perform seek tuning, keep touching ◀ or ▶ for about one second and release.

The tuner will scan the channels until a broadcast strong enough for good reception is found.

You can cancel seek tuning by touching either ◀ or ▶ briefly.

If you keep touching ◀ or ▶ you can skip broadcasting channels. Seek tuning starts as soon as you release the keys.

You can also perform seek tuning by holding the joystick left or right.

Advanced TV tuner operation



(1)

(1) Function display

Shows the function names.

- ▷ How to display the **FUNCTION** menu → Page 69

Storing and recalling broadcast stations

If you touch any of the preset tuning keys **P1**—**P12** you can easily store up to 12 broadcast stations for later recall with the touch of a key.

1 When you find a station that you want to store in memory keep touching a preset tuning key **P1** — **P12** until the preset number (e.g., **P.ch: 1**) stops flashing.

The number you have touched will flash in the preset number indicator and then remain lit. The selected station has been stored in memory.

The next time you touch the same preset tuning key **P1** — **P12** the station is recalled from memory.

To switch between **P1** — **P6** and **P7** — **P12**, touch Δ or ∇ .

When the touch panel keys are not displayed, you can display them by touching the screen.

When **P1** — **P6** and **P7** — **P12** are not displayed, you can display them by touching **DISP**.

- Up to 24 stations, 12 for each of two TV bands can be stored in memory.
- You can also use \blacktriangle and \blacktriangledown to recall stations assigned to preset tuning keys **P1** — **P12**.

Storing the strongest broadcast stations sequentially

1 Touch “**BSSM**” in the **FUNCTION** menu.

2 Touch “**START**” to turn **BSSM** on.

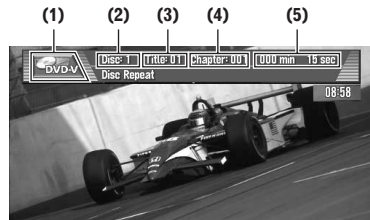
BSSM begins to flash. While **BSSM** is flashing the 12 strongest broadcast stations will be stored in order from the lowest channel up. When finished, **BSSM** disappears.

To cancel the storage process, touch “**STOP**”.

- Storing broadcast stations with **BSSM** may replace broadcast stations you have saved using **P1** — **P12**.

DVD Player (S-DVD)

Playing a disc



You can use navigation unit to control a DVD player or multi-DVD player, which is sold separately.

For details concerning operation, refer to the DVD player's or multi-DVD player's operation manual. This section provides information on DVD operations with navigation unit, which operations differ from those described in the DVD player's or multi-DVD player's operation manual.

(1) Source icon

Shows which source has been selected.

(2) Disc number indicator

Shows the disc currently playing when using a multi-DVD player.

(3) Title number indicator

Shows the title currently playing during DVD-Video playback.

(4) Chapter/track number indicator

Shows the chapter/track currently playing.

(5) Play time indicator

Shows the elapsed playing time of the current chapter/track.

1 Touch the source icon and then touch “**S-DVD**” to select the DVD player.

When the source icon is not displayed, you can display it by touching the screen.

2 Touch the screen to display the touch panel keys.

3 To skip back or forward to another chapter/track, touch \blacktriangleleft or \blacktriangleright briefly.

You can also skip back or forward to another chapter/track by moving the joystick left or right.

4 To perform fast forward or reverse, keep touching ◀ or ▶ for about one second and release.

You can also perform fast reverse/fast forward by holding the joystick left or right.

If you keep touching ◀ or ▶ for five seconds, the icon ◀◀ or ▶▶ changes into ◀◀◀ or ▶▶▶. When this happens, fast reverse/fast forward continues even if you release ◀ or ▶.

- To stop fast reverse/fast forward, touch reverse direction ◀ or ▶.

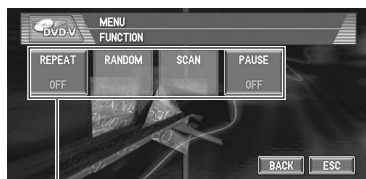
Selecting a disc

- Only when a multi-DVD player is connected to navigation unit, you can operate this function.

1 Touch ▲ or ▼ to select a disc.

You can also skip back or forward to another disc by moving the joystick up or down.

Advanced DVD player operation



(1)

(1) Function display

Shows the function names.

- How to display the **FUNCTION** menu → Page 69

Repeating play

- During PBC playback of Video CDs, this function cannot be operated.

1 Touch “REPEAT” in the FUNCTION menu.

Each touch of the “**REPEAT**” changes the settings as follows:

During DVD-Video playback

- **TITLE** — Repeat just the current title
- **CHAPTER** — Repeat just the current chapter
- **DISC** — Repeat the current disc

During Video CD or CD playback

- **TRACK** — Repeat just the current track
- **DISC** — Repeat the current disc
- If you select other discs during repeat play, the repeat play range changes to **DISC**.
- If you perform track search or fast forward/reverse during **TRACK**, the repeat play range changes to **DISC**.

Pausing disc playback

1 Touch “PAUSE” in the FUNCTION menu.

Touching “**PAUSE**” switches between “**ON**” and “**OFF**”.

Playing tracks in a random order

- You can operate this function only during CD playback.

1 Touch “RANDOM” in the FUNCTION menu.

Touching “**RANDOM**” switches between “**ON**” and “**OFF**”.

Tracks will play in a random order.

Scanning tracks of a CD

- You can operate this function only during CD playback.

1 Touch “SCAN” in the FUNCTION menu.

Touching “**SCAN**” switches between “**ON**” and “**OFF**”.

The first 10 seconds of each track is played.

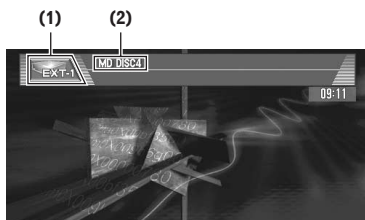
2 When you find the desired track touch “SCAN” to turn scan play off.

Using ITS playlists

- Only when a multi-DVD player is connected to navigation unit, you can operate these functions.
- This function differs slightly from ITS playback with a multi-CD player. With multi-DVD player, ITS playback applies only to the CD playing.
- Using ITS playlists → Page 80

External Unit

Operating the external unit



External unit refers to a Pioneer product (such as one available in the future) that, although incompatible as a source, enables control of basic functions by this unit. Two external units can be controlled by this unit. When two external units are connected, the allocation of them to external unit 1 or external unit 2 is automatically set by this unit.

For details concerning operation, refer to the external unit's operation manual. This section provides information on external unit operations with navigation units that differ from those described in the external unit's operation manual.

- Pressing the **DISP** button changes the screen display.
- Switching screen display → Page 98
- Operation varies depending on the external unit connected. (In some cases, the external unit may not respond.)

(1) Source icon

Shows which source has been selected.

(2) External unit indicator

Displays any connected external units.

1 Touch the source icon and then touch “EXT-1” or “EXT-2” to select the external unit.

2 Touch the screen to display the touch panel keys.

3 Touch any touch panel key to operate the external unit.

- Advanced external unit operation → Page 87

Advanced external unit operation



(1)

(1) Function display

Shows the function names.

- How to display the **FUNCTION** menu → Page 69

Operate the external unit by using 1 KEY - 6 KEY

The external unit can be operated by transmitting the operating commands set to **1 KEY - 6 KEY**.

- Operation varies depending on the external unit connected. (In some cases, the external unit may not respond.)

1 Touch “1-6KEY” in the FUNCTION menu.

2 Touch desired key (“1 KEY”-“6 KEY”) to operate the external unit.

Operate the external unit by using FUNCTION 1 - FUNCTION 4

The external unit can be operated by transmitting the operating commands set to **FUNCTION 1 - FUNCTION 4**.

- The operating commands set to **FUNCTION 1 - FUNCTION 4** vary depending on the external unit.
- Some functions may not be operated until you touch and hold the key.

- 1 Touch “**FUNCTION 1**” - “**FUNCTION 4**” in the **FUNCTION** menu.
- 2 Touch “**SEND**”.



The command displayed in “**Command name**” is transmitted to the external unit.

Switching the automatic and manual function

You can turn automatic and manual function on or off.

You can switch between **AUTO** and **MANUAL** functions of the external unit connected.

Initially, this function is set to **AUTO**.

- Operating commands set for **AUTO** and **MANUAL** operations vary depending on the external unit connected.

- 1 Touch “**AUTO / MANUAL**” in the **FUNCTION** menu.

Touching “**AUTO / MANUAL**” switches between “**AUTO**” and “**MANUAL**”.

Customizing the Audio Source Setting

Various settings according to your audiovisual requests are available with the audio source. This chapter describes the methods of changing the various settings and how to set of the LCD panel.

Audio Adjustments

Introduction of audio adjustments



(1)

(1) Audio display

Shows the audio function names.

➤ How to display the **AUDIO** menu → Page 69

If **EQ-EX** function has been selected and only when **EQ-EX** is turned on and **CUSTOM** is selected as the equalizer curve, you can switch to **BASS** and **TREBLE**.

Only when the subwoofer controller setting is **PREOUT FULL, NON FADING** will be displayed instead of **SUB WOOFER**.

➤ Setting the rear output and subwoofer controller → Page 94

When selecting the FM tuner as the source, you cannot switch to "**SLA**".

Using the equalizer

The equalizer lets you adjust the equalization to match vehicle interior acoustic characteristics as desired.

Recalling equalizer curves

There are six stored equalizer curves which you can easily recall at any time. Here is a list of the equalizer curves:

Equalizer curve

Powerful

Natural

Vocal

Custom

Flat

Super bass

1 Press EQ button to select the equalizer.

Press **EQ** button repeatedly to switch between the following equalizers:

POWERFUL — NATURAL — VOCAL — CUSTOM — FLAT — SUPER BASS

- CUSTOM** is an adjusted equalizer curve that you create.
- A separate **CUSTOM** curve can be created for each source. If you make adjustments, the equalizer curve settings will be memorized in **CUSTOM**.
- When **FLAT** is selected no supplement or correction is made to the sound. This is useful to check the effect of the equalizer curves by switching alternatively between **FLAT** and a set equalizer curve.

Using balance adjustment

You can select a fader/balance setting that provides an ideal listening environment in all occupied seats.

1 Touch "FAD/BAL" in the AUDIO menu.

When the rear output setting is **REAR SP SUB. W**, **BALANCE** will be displayed instead of **FAD/BAL**.

➤ Setting the rear output and subwoofer controller → Page 94

2 Touch ▲ or ▼ to adjust front/rear speaker balance.

Each time you touch ▲ or ▼ moves the front/rear speaker balance towards the front or the rear.

FRONT:15 — REAR:15 is displayed as the front/rear speaker balance moves from front to rear.

FR:00 is the proper setting when only two speakers are used.

When the rear output setting is **REAR SP SUB. W**, you cannot adjust front/rear speaker balance.

☞ Setting the rear output and subwoofer controller → Page 94

3 Touch ◀ or ▶ to adjust left/right speaker balance.

Each time you touch ◀ or ▶ moves the left/right speaker balance towards the left or the right.

LEFT:9 — RIGHT:9 is displayed as the left/right speaker balance moves from left to right.

3 Touch “+” or “-” to adjust the level of the equalizer band.

Each time you touch “+” or “-” increases or decreases the level of the equalization band. **+6 — -6** is displayed as the level is increased or decreased.

4 Touch ◀ or ▶ to select the desired frequency.

Touch ◀ or ▶ until the desired frequency appears in the display.

Low: 40 — 80 — 100 — 160 (Hz)

Mid: 200 — 500 — 1k — 2k (Hz)

High: 3.15k — 8k — 10k — 12.5k (Hz)

5 Touch ◀ or ▶ to select the desired Q factor.

Touch ◀ or ▶ until the desired Q factor appears in the display.

2WIDE — 1WIDE — 1NARROW — 2NARROW

☐ If you make adjustments, **CUSTOM** curve is updated.

Adjusting equalizer curves

You can adjust the currently selected equalizer curve setting as desired. Adjusted equalizer curve settings are memorized in **CUSTOM**.

- You can adjust the center frequency, level and the Q factor (curve characteristics) of each currently selected curve band (**LOW/MID/HIGH**).

- **BAND:**

You can select the equalizer band.

- **LEVEL:**

You can select the decibel (dB) level of the selected EQ.

- **FREQUENCY:**

You can select which frequency to be set as the center frequency.

- **Q FACTOR:**

You can select the details of the curve characteristics.

1 Touch “EQ MENU” in the AUDIO menu.

2 Touch ◀ or ▶ to select the equalizer band to adjust.

Each time you touch ◀ or ▶ selects equalizer bands in the following order:

LOW — MID — HIGH

Adjusting bass and treble

Use this function to adjust the bass and treble. The ability to select the frequency as well as the level gives you good control over the tonal balance of the audio.

The bass and treble adjust screens allow you to reduce or boost frequencies in the following area;

Bass - 40, 63, 100, 160 (Hz)

Treble - 2.5K, 4K, 6.3K, 10K (Hz)

- If **EQ-EX** is turned on and **CUSTOM** is selected as the equalizer curve, you can adjust bass and treble settings.

☞ Compensating for equalizer curves (**EQ-EX**) → Page 92

1 Touch “BASS” or “TREBLE” in the AUDIO menu.

2 Touch ◀ or ▶ to select the desired frequency.

3 Touch “+” or “-” to adjust the bass or treble level.

Each time you touch “+” or “-” increases or decreases the bass or treble level. **+6 — -6** is displayed as the level is increased or decreased.

Adjusting loudness

Loudness compensates for deficiencies in the low- and high-sound ranges at low volume.

- 1 Touch **“LOUDNESS”** in the **AUDIO** menu.
- 2 Touch **“ON”** to turn loudness on.
To turn loudness off, touch **“OFF”**.
- 3 Touch **◀** or **▶** to select a desired level.
Each time you touch **◀** or **▶** selects level in the following order:
LOW — MID — HIGH

Using subwoofer output

This unit is equipped with a subwoofer output which can be turned on or off.

- When the subwoofer output is on, you can adjust the cut-off frequency and the output level of the subwoofer.

- 1 Touch **“SUB WOOFER”** in the **AUDIO** menu.
When **PREOUT** (the subwoofer controller setting in **INITIAL** menu) is **FULL**, you cannot select **“SUB WOOFER”**.
⌚ Rear speaker setting → Page 94
- 2 Touch **“ON”** to turn subwoofer output on.
To turn subwoofer output off, touch **“OFF”**.
- 3 Touch **“REVERSE”** or **“NORMAL”** to select the phase of subwoofer output.
- 4 Touch **“+”** or **“-”** to adjust the output level of the subwoofer.
+6 — -6 is displayed as the level is increased or decreased.
- 5 Touch **◀** or **▶** to select cut-off frequency.
Each time you touch **◀** or **▶** selects cut-off frequencies in the following order:
50 — 80 — 125 (Hz)
Only frequencies lower than those in the selected range are output from the subwoofer.

Using non fading output

When the non fading output setting is on, the audio signal does not pass through navigation unit's low pass filter (for the subwoofer), but is output through the RCA output.

- 1 Touch **“NON FADING”** in the **AUDIO** menu.
Only when **PREOUT** (the subwoofer controller setting in **INITIAL** menu) is **FULL**, you can select **“NON FADING”**.
⌚ Rear speaker setting → Page 94
- 2 Touch **“ON”** to turn non fading output on.
To turn non fading output off, touch **“OFF”**.
- 3 Touch **“+”** or **“-”** to adjust the output level of the non fading.
+6 — -6 is displayed as the level is increased or decreased.

Using the high pass filter

When you do not want low sounds from the subwoofer output frequency range to play from the front or rear speakers, turn the **HPF** (high pass filter) on. Only frequencies higher than those in the selected range are output from the front or rear speakers.

- 1 Touch **“HPF”** in the **AUDIO** menu.
- 2 Touch **“ON”** to turn high pass filter on.
To turn high pass filter off, touch **“OFF”**.
- 3 Touch **◀** or **▶** to select cut-off frequency.
Each time you touch **◀** or **▶** selects cut-off frequencies in the following order:
50 — 80 — 125 (Hz)
When **PREOUT** (the subwoofer controller setting in **INITIAL** menu) is **SW**, the **HPF** function is effective for front speakers only.

Adjusting source levels

SLA (source level adjustment) lets you adjust the volume level of each source to prevent radical changes in volume when switching between sources.

- Settings are based on the FM tuner volume level, which remains unchanged.

1 Compare the FM tuner volume level with the level of the source you wish to adjust.

2 Touch “SLA” in the AUDIO menu.

3 Touch “+” or “-” to adjust the source volume.

+4 — -4 is displayed as the source volume is increased or decreased.

Sources are set to same source level adjustment volume automatically.

- The FM tuner (RADIO) and AM tuner (RADIO)
- CD and MP3
- DVD (built-in DVD drive) and **S-DVD** (optional DVD player)
- **EXT-1** and **EXT-2**
- **AUX** and **AV**

Compensating for equalizer curves (EQ-EX)

The **EQ-EX** function smoothes the effects of each equalizer curve. Furthermore, you can adjust bass and treble for each source when **CUSTOM** curve is selected.

1 Touch “EQ-EX” in the AUDIO menu.

Touching “**EQ-EX**” switches between “**ON**” and “**OFF**”.

Setting Up the DVD Player

To set up the DVD of an optional DVD player, please refer to the “Owner’s Manual” for that DVD player.

DVD setup adjustments



(1)

You can use this menu to change audio, subtitle, parental lock and other DVD settings.

(1) DVD setup menu display

Shows the DVD setup menu names.

1 Touch ■ and touch the screen to display touch keys.

2 Touch → to display “SET UP”.

Touch → until “**SET UP**” appear in the screen. **SET UP** will be displayed instead of **MENU**.

3 Touch “SET UP” when the disc is stopped.

The DVD setup menu is displayed.

4 Touch the desired function.

Setting the language

You can set a desired subtitle, audio and menu language. If the selected language is recorded on the DVD, subtitles, audio, menu are displayed in that language.

1 Touch “SET UP” and “LANGUAGE” and then touch “SUB. T LANGUAGE”, “AUDIO LANGUAGE” or “MENU LANGUAGE”.

Each language menu is displayed and the currently set language is selected.

2 Touch the desired language.

When you select "**OTHER**", a language code input display is shown. Input the four digit code of the desired language then touch "**ENTER**".

- Language code chart for DVD → Page 100
- ❑ If the selected language is not recorded on the disc, the default language specified on the disc is output and displayed.
- ❑ You can also switch the subtitle and audio language by touching "**SUB.T**" or "**AUDIO**" during playback.
- Changing the subtitle language during playback (Multi-subtitle) → Page 76
- Changing audio language during playback (Multi-audio) → Page 76
- ❑ Even if you use "**SUB.T**" or "**AUDIO**" to switch the subtitle or audio language, this does not affect the settings here.

Setting assist subtitles on or off

Assist subtitles offer explanations for the aurally impaired. However, they are only displayed if they are recorded on the DVD.

You can turn assist subtitles on or off as desired.

1 Touch "SET UP" and then touch "A SUB TITLE".

Touching "**A SUB TITLE**" switches between "**ON**" and "**OFF**".

Setting angle icon display

You can set to display the angle icon on scenes where the angle can be switched.

1 Touch "SET UP" and then touch "M. ANGLE".

Touching "**M. ANGLE**" switches between "**ON**" and "**OFF**".

Setting the aspect ratio

There are two kinds of display. A wide screen display has a width-to-height ratio (TV aspect) of 16:9, while a regular display has a TV aspect of 4:3. Be sure to select the correct TV aspect for the display connected to REAR OUT.

- When using a regular display, select either **LETTER BOX** or **PANSCAN**. Selecting **16:9** may result in an unnatural picture.

- If you select the TV aspect, navigation unit's display changes to the same setting.

1 Touch "SET UP" and then touch "TV ASPECT".

Each touch of the TV ASPECT changes the settings as follows:

- **16:9** — Wide screen picture (16:9) is displayed as it is (initial setting)
- **LETTER BOX** — The picture is in the shape of a letter box with black bands at the top and bottom of the screen
- **PANSCAN** — The picture is cut short at the right and left of the screen
- ❑ When playing discs that do not specify **PANSCAN**, playback is with **LETTER BOX** even if you select the **PANSCAN** setting. Confirm whether the disc package bears the **16:9 LB** mark. (See "Hardware Manual".)
- ❑ Some discs do not enable changing of the TV aspect. For details, refer to the disc's instructions.

Setting the parental lock

Some DVD-Video discs let you use parental lock to restrict the viewing of violent and adult oriented scenes by children. You can set the parental lock level in steps as desired.

- When you set a parental lock level and then play a disc featuring parental lock, code number input indications may be displayed. In this case, playback will begin when the correct code number is input.

Setting the code number and level

When you first use this function, register your code number. If you do not register a code number, parental lock will not operate.

1 Touch "SET UP" and "PARENTAL" and then touch "PARENTAL".

2 Touch 0 — 9 to input a four digit code number.

3 While the input number is displayed, touch "ENTER".

The code number is registered, and you can now set the level.

4 Touch any of 1 — 8 to select the desired level.

The parental lock level is set.

- **LEVEL 8** — Playback of the entire disc is possible (initial setting)
 - **LEVEL 7 — LEVEL 2** — Playback of discs for children and non-adult oriented discs is possible
 - **LEVEL 1** — Playback of discs for children only is possible
- If you want to change the parental level, enter the registered code number in the Step 2.
 - We recommend to keep a record of your code number in case you forget it.
 - The parental lock level is recorded on the disc. You can confirm it by looking at the disc package, included literature or on the disc itself. With discs that do not feature a recorded parental lock level, you cannot use parental lock.
 - With some discs, parental lock operates to skip certain scenes only, after which normal playback resumes. For details, refer to the disc's instructions.
 - If you forget the registered code number, touch "**CLEAR**" 10 times on the screen in the Step 2. The registered code number is canceled, letting you register a new one.

1 Touch the source icon and then touch "SOURCE OFF" to turn source off.

When the source icon is not displayed, you can display it by touching the screen.

2 Touch "A.MENU" and then touch "INITIAL" to display the function names.

The function names are displayed and operable ones are selected.

When "A.MENU" is not displayed, you can display it by touching the screen.

To return to the previous display, touch "**BACK**".

To return to the display of each source, touch "**ESC**".

Switching the auxiliary setting

It is possible to use auxiliary equipment with navigation unit. Activate the auxiliary setting when using auxiliary equipment connected to navigation unit.

1 Touch "AUX" in the INITIAL menu.

Touching "AUX" switches between "ON" and "OFF".

Initial Settings

Adjusting initial settings



(1)

Initial settings lets you perform initial set up of different settings for navigation unit.

(1) Function display

Shows the function names.

Setting the rear output and subwoofer controller

This unit's rear output (rear speaker leads output and RCA rear output) can be used for full-range speaker (**REAR SP FULL**) or subwoofer (**REAR SP SUB. W**) connection. If you switch the rear output setting to the **REAR SP SUB. W**, you can connect a rear speaker lead directly to a subwoofer without using an auxiliary amp. Initially, navigation unit is set for rear full-range speaker connection (**REAR SP FULL**). When rear output is connected to full range speakers (when **REAR SP FULL** is selected), you can connect the RCA subwoofer output to a subwoofer. In this case, you can select whether to use the subwoofer controller's (low pass filter, phase) built-in **PREOUT SUB. W** or the auxiliary **PREOUT FULL**.

1 Touch “REAR SP” in the INITIAL menu.

2 Touch “REAR SP” to switch the rear output setting.

When no subwoofer is connected to the rear output, select **FULL**.

When a subwoofer is connected to the rear output, select **SUB. W**.

- When the rear output setting is **SUB. W**, you cannot change the subwoofer controller.

3 Touch “PREOUT” to switch the subwoofer output or non fading output.

- Even if you change this setting, there is no output unless you turn “**NON FADING**” or “**SUB WOOFER**” in the **AUDIO** menu “**ON**”.
- Using non fading output → Page 91
- Using subwoofer output → Page 91
- If you change the subwoofer controller (**REAR SP**), the subwoofer output (**SUB WOOFER**) and non fading output (**NON FADING**) in the **AUDIO** menu return to the factory settings.
- Both rear speaker leads output and RCA rear output are switched simultaneously in this setting.

Switching the sound muting/attenuation

Sound from this system is muted, attenuated or mixed automatically in the following cases:

- When a call is made or received using a cellular telephone connected to navigation unit.
- When the voice guidance is output.

1 Touch “TEL/GUIDE” in the INITIAL menu.

Each touch of the “**TEL/GUIDE**” changes the settings as follows:

- **MUTE**— Muting
- **ATT** — Attenuation
- **NORMAL** — Volume does not change
- The sound is turned off, no audio adjustment is possible.
- When a phone connection is made, **MUTE** or **ATT** is indicated.

- Operation returns to normal when the phone connection or the voice guidance is ended.
- Even when you receive a phone call, navigation voice guidance cannot be attenuated or muted. Use the **Hardware Volume** to control the navigation voice guidance volume.

Switching the automatic disc playback

You can turn automatic disc playback on or off when you insert a disc into the disc loading slot. When this function is on, the disc will be automatically played after it is inserted into the disc loading slot.

Initially, this function is set to **OFF**.

1 Touch “DISC AUTO” in the INITIAL menu.

Touching “**DISC AUTO**” switches between “**ON**” and “**OFF**”.

Switching the dimmer setting for sub-display

To prevent the sub-display from being too bright at night, the sub-display is automatically dimmed when the vehicle’s headlights are turned on. You can turn dimmer on or off.

1 Touch “SUB. D. DIM” in the INITIAL menu.

Touching “**SUB. D. DIM**” switches between “**ON**” and “**OFF**”.

- Initially, this function is set to **OFF**.

Changing the voice output of the navigation guidance

When there is a navigation guidance, you can mix the guidance voice/beep sound from a navigation with the audio sound from this system. You can select the speaker output the navigation guidance.

1 Touch “GUIDE VOICE” in the INITIAL menu.

Each touch of the “**GUIDE VOICE**” changes the settings as follows:

L+R (Front speakers) — **R** (Front right speaker) — **L** (Front left speaker)

Switching the 5.1ch setting

When the navigation unit is combined with the multi-channel processor system (sold separately), you can use the multi-channel sound. Enter the following setting when combining the multi-channel processor system.

CAUTION

- **DO NOT enter this setting before you connect the multi-channel processor system. (If this setting is entered, the RCA will output maximum volume for the multi-channel processor system.) Pioneer is not responsible for any damage to the speaker equipment caused by ignoring this warning.**

1 Touch the source icon and then touch "SOURCE OFF" to turn source off.

When the source icon is not displayed, you can display it by touching the screen.

2 Turn the ACC OFF, and then turn it ON again.

3 Press EQ button, and then without releasing it press ANGLE (-) button.

4 Release ANGLE (-) button first, and then release EQ button.

5 Touch "5.1ch" in the INITIAL menu.

If you touch "5.1ch", it will be turned "ON". If you touch "5.1ch" again to turn "OFF" the setting, "5.1ch" will disappear. If you want to turn it "ON" again, you have to repeat the procedure from the Step 1.

Other Functions

Setup adjustments



(1)

(1) Setup menu display

Shows the setup function names.

➤ How to display the **SETUP** menu → Page 69

Setting the video input

You can switch the setting according to the connected component.

- Select "**VIDEO**" to watch video of a connected component as **AV** source.
- Select "**M-DVD**" to watch video of a connected DVD player as **S-DVD** source.

1 Touch "AV INPUT" in the SETUP menu.

Each touch of the "AV INPUT" changes the settings as follows:

- **OFF** — No video component is connected
- **VIDEO** — External video component
- **M-DVD** — DVD player connected with RCA cable

When a DVD player is connected with an AV-BUS cable, do not select "**M-DVD**" or else no picture is displayed even if you select **S-DVD**.

Setting for rear view camera

The navigation unit features a function that automatically switches to the rear camera image (REAR VIEW CAMERA IN jack) when a rear camera is installed on your vehicle. When the shift lever is in REVERSE (R) position, the screen automatically switches to a rear view camera. (For more details, consult with your dealer.) You can also use the camera as a rear view camera (**Rear View**). In this case, you can see the image of the rear view camera during normal driving. (The navigation map screen can be displayed on the right-hand side and the camera image can be displayed on the left.) Please beware that in this

setting, camera image is not resized to fit, but that a portion of what is seen by the camera is not viewable.

CAUTION

- **Pioneer recommends the use of a camera which outputs mirror reversed images, otherwise screen image may appear reversed.**
-
- Confirm the setting immediately whether the display changes to a rear view camera image when the shift lever is moved to REVERSE (R) from another position.
 - When the whole screen changes to a rear view camera image during normal driving, switch to another setting.
- Rear View** can be displayed at all times (e.g. when monitoring an attached trailer, etc.) as a split screen where map information is partially displayed. Please beware that in this setting, camera image is not resized to fit, but that a portion of what is seen by the camera is not viewable.
 - Initially, this function is set to **OFF**.

1 Touch “CAMERA” in the SETUP menu.

2 Touch “CAMERA” to turn rear view camera setting on.

Touching **“CAMERA”** switches between **“ON”** and **“OFF”**.

- Unless this setting is **“ON”**, you cannot switch to Rear View mode.

3 Touch “POLARITY” to select an appropriate setting for polarity.

Each time you touch **“POLARITY”** switches between the following polarity:

- **BATTERY** — When the polarity of the connected lead is positive while the shift lever is REVERSE (R) position
- **GND** — When the polarity of the connected lead is negative while the shift lever is REVERSE (R) position

Selecting the video of rear display

When the navigation screen is displayed on front, you can select either showing the navigation screen on rear display or the video of the selected source.

- The map screen navigation images output to the rear display differ from standard NTSC format images. Therefore, their quality will be inferior to the images that appear on the front display.

1 Touch “REAR DISP” in the SETUP menu.

Each touch of the **“REAR DISP”** changes the settings as follows:

- **SOURCE** — Display the video of the selected source on rear display
 - **NAVI** — Display the navigation video on rear display when the navigation screen is displayed on front
- When selecting **“SOURCE”** in **“REAR DISP”**, when the selected source is an audio source, nothing is displayed on rear display.
 - When selecting **Rear View**, nothing is displayed on the left-hand side of the rear display.

Setting the slide back function

You can adjust the LCD panel slide position to prevent the display from hitting the shift lever of an automatic vehicle when it is in P (park) position.

- Please be careful, as the LCD panel will slide immediately after the setting is turned **“ON”**.

1 Touch “FLAP SET BACK” in the SETUP menu.

Touching **“FLAP SET BACK”** switches between **“ON”** and **“OFF”**.

Setting the automatic open function

When you do not wish the display to open/close automatically, you can set the automatic open function to the manual mode.

1 Touch "AUTO FLAP" in the SETUP menu.

Each touch of the "AUTO FLAP" changes the settings as follows:

- **MANUAL** — You have to press **OPEN/CLOSE** button to open/close the display
- **AUTO** — The display automatically opens/closes when power to navigation unit is turned on

Using the AUX source

An IP-BUS-RCA Interconnector such as the CD-RB20/CD-RB10 (sold separately) lets you connect navigation unit to auxiliary equipment featuring RCA output. For more details, refer to the IP-BUS-RCA Interconnector owner's manual.

Selecting AUX as the source

1 Touch the source icon and then touch "AUX" to select AUX as the source.

When the source icon is not displayed, you can display it by touching the screen. If the auxiliary setting is turned "OFF", "AUX" cannot be selected.

- Switching the auxiliary setting → Page 94

Switching the background display

You can switch background displays while listening to each source.

1 Press ENT button.

Each time you press **ENT** button the display changes in the following order:

Audio source

- **NAVI** (Normal wall paper) — **AV** (Video input) — **DVD** (DVD-Video in the built-in DVD drive)

Video source

- Video of currently selected source — **NAVI** (Normal wall paper) — **AV** (Video input) — **DVD** (DVD-Video in the built-in DVD drive)

- ❑ When the **AV** (Video input) setting is not set to "VIDEO", the background display will not switch to **AV** (Video input).
- Switching the AV input setting → Page 96
- ❑ Only the REAR ON mode is active, the background display will switch to **DVD** (DVD-Video in the built-in DVD drive).
- Using the rear display → "Hardware Manual"
- ❑ During the memory navi mode, you cannot switch to **DVD** (DVD-Video in the built-in DVD drive).

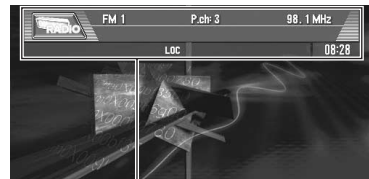
Switching the Screen Using the DISP Button

You can change the screen display using the **DISP** button.

(E.g., **RADIO**)



Preset list



Information plate

- ❑ You cannot switch the screen display with the **DISP** button for the following sources: **S-DVD** (Source DVD), **AV**, **AUX**, **EXT**
- ❑ The indication of the information plate will be switched for the items marked with asterisk (*).

RADIO

Preset list — list off (Information plate only)

DVD-Video

Normal display — Information plate 1 (with Viewing angle, Subtitle language, Audio language) — Information plate 2 (with Repeat range)

CD (Normal Audio CD)

Title list — list off (Information plate only)

CD (CD TEXT disc)

Some discs have certain information encoded on the disc during manufacture. These discs, which may contain such information as the CD title, track title, artist's name, are called CD TEXT discs.

Track List — Disc Title* — Disc Artist* — Track Title* — Track Artist*

- If specific information has not been recorded on a CD TEXT disc, **NO XXXX** will be displayed (e.g., **NO ARTIST**).

CD (MP3 disc)

Folder and title list — list off (Information plate only)

M-CD (Normal Audio CD)

Disc List — Disc Title

M-CD (CD TEXT disc)

Disc List — Disc Title* — Disc Artist* — Track Title* — Track Artist*

- If specific information has not been recorded on a CD TEXT disc, **NO XXXX** will be displayed (e.g., **NO ARTIST**).

TV

Preset list — list off (Information plate only)

XM (XM tuner)

CH display* — Artist name* — Song title display* — Channel number display*

Language Code Chart for DVD

AV

Chapter 8 Switching the Screen Using the DISP Button

Customizing the Audio Source Setting

Language (code), input code	Language (code), input code	Language (code), input code
Japanese (ja), 1001	Guarani (gn), 0714	Pashto, Pushto (ps), 1619
English (en), 0514	Gujarati (gu), 0721	Quechua (qu), 1721
French (fr), 0618	Hausa (ha), 0801	Rhaeto-Romance (rm), 1813
Spanish (es), 0519	Hindi (hi), 0809	Kirundi (rn), 1814
German (de), 0405	Croatian (hr), 0818	Rumanian (ro), 1815
Italian (it), 0920	Hungarian (hu), 0821	Kinyarwanda (rw), 1823
Chinese (zh), 2608	Armenian (hy), 0825	Sanskrit (sa), 1901
Dutch (nl), 1412	Interlingua (ia), 0901	Sindhi (sd), 1904
Portuguese (pt), 1620	Interlingue (ie), 0905	Sango (sg), 1907
Swedish (sv), 1922	Inupiak (ik), 0911	Serbo-Croatian (sh), 1908
Russian (ru), 1821	Indonesian (in), 0914	Shinghalese (si), 1909
Korean (ko), 1115	Icelandic (is), 0919	Slovak (sk), 1911
Greek (el), 0512	Hebrew (iw), 0923	Slovenian (sl), 1912
Afar (aa), 0101	Yiddish (ji), 1009	Samoa (sm), 1913
Abkhazian (ab), 0102	Javanese (jw), 1023	Shona (sn), 1914
Afrikaans (af), 0106	Georgian (ka), 1101	Somali (so), 1915
Amharic (am), 0113	Kazakh (kk), 1111	Albanian (sq), 1917
Arabic (ar), 0118	Greenlandic (kl), 1112	Serbian (sr), 1918
Assamese (as), 0119	Cambodian (km), 1113	Siswati (ss), 1919
Aymara (ay), 0125	Kannada (kn), 1114	Sesotho (st), 1920
Azerbaijani (az), 0126	Kashmiri (ks), 1119	Sundanese (su), 1921
Bashkir (ba), 0201	Kurdish (ku), 1121	Swahili (sw), 1923
Belorussian (be), 0205	Kirghiz (ky), 1125	Tamil (ta), 2001
Bulgarian (bg), 0207	Latin (la), 1201	Telugu (te), 2005
Bihari (bh), 0208	Lingala (ln), 1214	Tajik (tg), 2007
Bislama (bi), 0209	Laotian (lo), 1215	Thai (th), 2008
Bengali, Bangla (bn), 0214	Lithuanian (lt), 1220	Tigrinya (ti), 2009
Tibetan (bo), 0215	Latvian, Lettish (lv), 1222	Turkmen (tk), 2011
Breton (br), 0218	Malagasy (mg), 1307	Tagalog (tl), 2012
Catalan (ca), 0301	Maori (mi), 1309	Setswana (tn), 2014
Corsican (co), 0315	Macedonian (mk), 1311	Tongan (to), 2015
Czech (cs), 0319	Malayalam (ml), 1312	Turkish (tr), 2018
Welsh (cy), 0325	Mongolian (mn), 1314	Tsonga (ts), 2019
Danish (da), 0401	Moldavian (mo), 1315	Tatar (tt), 2020
Bhutani (dz), 0426	Marathi (mr), 1318	Twi (tw), 2023
Esperanto (eo), 0515	Malay (ms), 1319	Ukrainian (uk), 2111
Estonian (et), 0520	Maltese (mt), 1320	Urdu (ur), 2118
Basque (eu), 0521	Burmese (my), 1325	Uzbek (uz), 2126
Persian (fa), 0601	Nauru (na), 1401	Vietnamese (vi), 2209
Finnish (fi), 0609	Nepali (ne), 1405	Volapu`k (vo), 2215
Fiji (fj), 0610	Norwegian (no), 1415	Wolof (wo), 2315
Faroese (fo), 0615	Occitan (oc), 1503	Xhosa (xh), 2408
Frisian (fy), 0625	(Afan) Oromo (om), 1513	Yoruba (yo), 2515
Irish (ga), 0701	Oriya (or), 1518	Zulu (zu), 2621
Scottish Gaelic (gd), 0704	Panjabi (pa), 1601	
Galician (gl), 0712	Polish (pl), 1612	

Operating Your Navigation System with Voice

To Ensure Safe Driving

⚠ CAUTION

- For safety reasons, **Voice Help menu (Voice Recog.Help)** is not available while your vehicle is in motion. To enable this function, you must stop in a safe place and put on the parking brake before setting your route.





Basics of Voice Operation

Your Pioneer Navigation System comes with the latest in voice recognition technology. You can use voice commands to operate many of its functions. This chapter describes where you can use voice commands, and also what commands the system accepts.

- ❑ **In order to operate the navigation unit by voice, you need the microphone kit (CD-VC1), which is sold separately. Please refer to the “Owner’s Manual” for the microphone kit.**
- ❑ **Some voice commands cannot be used during the memory navi mode.**

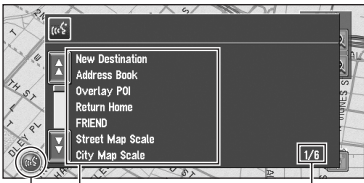
Flow of voice operation

You can start voice operation any time even when the map screen is displayed or audio is operated. The basic steps of voice operation are as follows.

- 1 Touch **VOICE** icon to activate voice operation.
 
- 2 Speak a command into the microphone.
 
- 3 When the command is recognized, it is repeated.
 
- 4 As necessary, repeat Steps 2 and 3.
 
- 5 The voice command is carried out.

When using voice operation for the first time

Until you are familiar with this system, it is recommended to stop the vehicle in a safe place and refer to the commands displayed in the Voice Help menu (a list of the words you can speak). When your vehicle is parked with the parking brake on, Touch **VOICE** icon to display a list of available voice commands (Voice Help menu). Display of the Voice Help menu can be turned on/off with “**Voice Recog.Help**” in the Settings menu.



VOICE icon **Voice Help** **Current page**



When voice command is possible



When voice command is not accepted

- ❑ If no voice icon is displayed, check to see whether the microphone is properly connected and turn the power on again.
- When you are used to voice operation features and no longer need Voice Help, you can turn it off → Page 64

Scrolling through the Voice Help Menu

Scroll through the remaining commands using or . You can also display the commands by saying the words "Next Page" (or "Previous Page").

- ❑ If you want to listen to the message of the Navigation System, say "Repeat".
- ❑ If you want to return to the previous screen, say "Back".

To cancel voice operation

You can cancel voice operation features at any time by pressing the **POS** button on the Navigation System. After you cancel voice operation, the map is displayed.

- ❑ If the system fails to recognize the command you speak, touch **VOICE** icon or say "Next option" and other operable commands will be displayed. If you then touch **VOICE** icon within 3 seconds, yet more commands are shown. Repeat this until the command you want to use is shown.
- ❑ If there are too many items to list, "1/**" is displayed.

- ❑ Depending on the operating state of the Navigation System, some commands displayed in Voice Help may be unavailable.
- ❑ If no command is made in the next 6 seconds, voice recognition is canceled and the Navigation System is on hold until the next operation. Touch **VOICE** icon to reactivate voice operation.

Operating by only voice when the Navigation System is started

Turning on "**Auto Voice Recognition**" in the Settings menu allows all settings to be implemented by voice from after the Navigation System is turned on and until the route is set (applies only if the route is not yet set).

- ❑ If you press the **VOICE** button on the steering remote control in CD-VC1 (sold separately) during operation, voice operation mode is canceled.

Voice Commands

Commands marked with an asterisk (*) cannot be used in memory navi mode.

Common commands

Next Page, Previous Page, Back, Next Option, Repeat

Commands for display change

Displaying the navigation screen: Display NAVIGATION

Displaying the Audio screen: Display AV

Available voice commands related to navigation

You can say the following commands:

- ❑ Give the following verbal commands after switching to the navigation screen.

Specifying your destination

New Destination*, Address Book*, Return Home*, <Registered name*>, <POI category name*>

- ❑ For the Address Book, <Registered name>, and <POI category name>, only the commands displayed in Voice Help can be used.

- ❑ When you input a telephone number by voice, only numbers in data can be recognized.
- ❑ You cannot search for telephone numbers of registered locations.

Operating the route being guided

Rerouting*, XX mi/km detour*, Cancel Route, Cancel Way Point*, Route Profile, Use/Avoid Freeway*, Use/Avoid Ferry*, Use/Avoid Tollroad*, Fast Route*, Short Route*, Traffic List*, Traffic On Route*, Traffic Flow List*

Changing map display

Street Map Scale, City Map Scale, Region Map Scale, Zoom IN, Zoom Out, Route Profile, Driver's View, Map View, Route View, Guide View, Rear View, Vehicle Dynamics, Overlay POI*, Cancel Overlay POI*, Use Traffic Flow

Available voice commands related to audio

- ❑ The commands you can give verbally depend on the source being switched.
- ❑ Some commands may be canceled according to the condition of audio unit being combined.

Common commands for Audio operations

Disc, Source DVD, Multi CD, Radio, TV Tuner, AV IN, Auxiliary, XM Radio, Source On, Source Off

For RADIO source

Preset 1-6, Seek Up/Down, Band Change

For DISC [DVD-Video, CD, MP3] source

Track 1-20, Repeat Play, Random Play

- ❑ In the case of discs containing MP3 files and audio data (CD-DA), the system recognizes which is currently being played back.
- ❑ In the case of MP3 discs, the system plays back tracks in the current folder.

For Multi-CD (M-CD) source

Track 1-20, Random Play, Disc 1-12, ITS Play, Next Disc, Previous Disc

For XM source

Preset 1-6, Band Change

For TV source

Preset 1-12, Seek Up/Down, Band Change

For S-DVD (M-DVD) source

Disc 1-6, ITS Play, Next Disc, Previous Disc, Random play

An Example of Voice Operation

In this example, you want to search for the nearest gas station. When presented with a list of search options, you say the number to the left of the option you want to select.

- ❑ Give the following verbal commands after switching to the navigation screen.
- Voice commands related to Navigation → Page 102

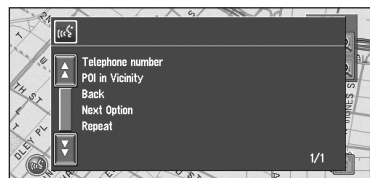
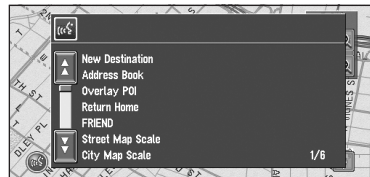
1 Touch VOICE icon.

A list of commands for voice operation appears. After the message, the beep indicates that the system is ready to accept your voice command. You say a command after this beep.

- ❑ Uttering <POI category name> using this procedure starts a vicinity search in that category. In this case, proceed to step 6.

2 Say "New Destination".

A message to prompt the next operation is given.



3 Say “POI in Vicinity”.

You say the contents you want to operate. Here, selection method of your destination is specified. When you want to search the gas station nearest to the current location, say “POI in Vicinity”.

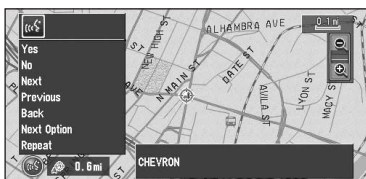
4 Say “GAS Station”.

Displays the name of a major gas station group.

5 Say “All Categories”.

The map of the nearest gas station is shown. The message, “Would you like to stop by?” follows.

6 After confirming the location, say “Yes”.



With the location shown on the map set as the destination (or way point), the route calculation starts.

- If you want to see maps with other options, at Step 6 say “Next” (or “Previous”).
- If you say “No”, the map of that place can be displayed.
- Searching the destination by map → Page 33

Tips for Voice Operation

For your voice commands to be correctly recognized and interpreted, ensure that conditions are suitable for recognition.

Reduce the volume setting on your vehicle audio system

- The sound volume is automatically reduced during voice operation → Page 63

Close the vehicle windows

Please note that wind through the vehicle window or miscellaneous noise from outside the vehicle can interfere with voice operation.

Position the microphone carefully

For optimum pick-up, the microphone should be fixed at a suitable distance directly in front of the driver.

- In order to operate the navigation unit by voice, you need the microphone kit (CD-VC1), which is sold separately. Please refer to the “Owner’s Manual” for the microphone kit.

Pause before giving a command

Speaking too soon may cause the recognition to fail.

Pronounce your commands carefully

Speak slowly, deliberately and clearly.

Appendix

Installing the Program

The program is installed to the Navigation System using the application disc.

This is not necessary if your dealer already performed the installation.

When installing the program, you carry out the following operations. When all the setup procedures are completed, you can use the Navigation System.

- 1 Insert the disc while the vehicle is parked.
- 2 Select the language used for the Navigation System.
- 3 Setting the clock.

1 Park your vehicle in a safe place.

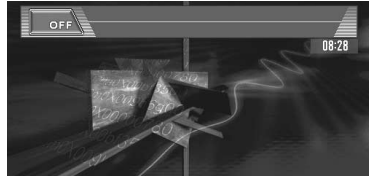
Leave the engine on, and make sure that the parking brake is applied.

2 Insert the Pioneer DVD Map disc to the disc loading slot of the Navigation System.

When the upgraded program has been found, installation of the program starts immediately.

CAUTION

- Once the installation of the program starts, do not stop the engine of your vehicle nor switch off the Navigation System until the installation is completed and the following Audio screen appears.



3 Press the NAVI/AV button to change the navigation screen.

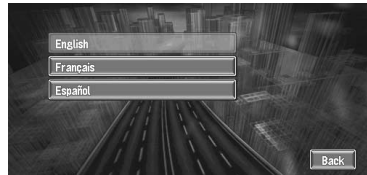
4 Touch "Yes/Oui".

When you start the navigation unit for the first time, you will see a confirmation message asking if you wish to select another language. English is the default language of the Navigation System. If desired, you can select another language as shown.

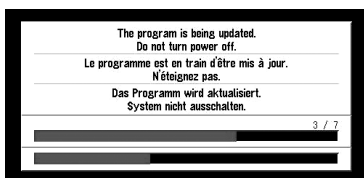
- To keep English, touch "**No/Non**". After this, proceed to Step 7.
- When you want to select another language, touch "**Yes/Oui**", and proceed to the next step.

5 Select the language from the list.

Touch the language you want to use.



- The language selected here is reflected for the Navigation functions (e.g., Destination search, etc.) only.
- To Change the language → Page 64 Installation of the program, in the language you chose, begins.



When the installation is complete, the opening display appears.



6 Press the NAVI/AV button to change the navigation screen.

Some time is needed until navigation is ready.

7 Check the details of the cautionary message and touch "OK".

8 To set the time difference, touch "+" or "-".

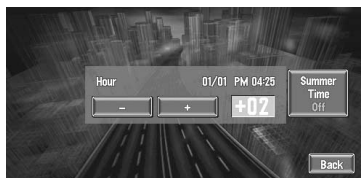


Time difference

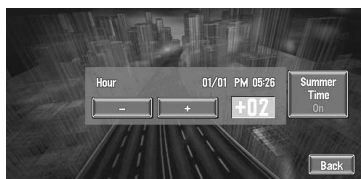
The time difference between the time originally set in this unit (Pacific Standard Time) and the current location of your vehicle is shown. If necessary, adjust the time difference. Touching "+" or "-" changes the time difference display in one-hour increments. The time difference can be set from +3 to -3 hours.

9 If necessary, set to summer time.

Daylight Saving Time (DST) is off by default. Touch **"Summer Time"** to change the time if you are in the daylight saving period. This turns the display below summer time **"On"**.



10 To complete the setting, touch "Back".



The map of your surroundings appears.

This completes the setup of your Navigation System. Chapter 1 explains the basic operation of your Navigation System.

➤ To change the time later → Page 67

Memory Navi Mode

While the map disc is inserted, you can store the data on the map disc into the memory of the navigation unit. If the map disc is removed from the navigation unit after the data is stored, navigation is performed using the data in the memory (memory navi mode). In the memory navi mode, you can play a music CD or DVD-Video on the navigation unit while navigation is taking place. The operation is automatically switched to the memory navi mode when the map disc is removed from the navigation unit.

Navigation in the memory navi mode

During the memory navi mode, navigation is performed only using the data read into the memory. Therefore, some functions are restricted compared with navigation using the map disc (DVD navi mode). These function buttons, which cannot be used in the memory navi mode, are indicated in light gray. If you want to use these functions, please insert the map disc again. In addition, you may need to insert the map disc and store new data in the memory in during navigation operation, such as when the destination is far away.

The memory navi mode uses the following map data to perform navigation.

The following are collectively known as Memory Data:

- Manually downloaded memory area data in the "**Map In Memory**" of the Settings menu (Manual downloaded Memory Area)
- Automatically downloaded memory data of the surrounding areas during the route search (Auto downloaded Memory Area)

↪ Setting of the memory area → Page 66

What is manual downloaded memory area?

Memory area is the area of the map data, which the user voluntarily read into the memory for the memory navi mode. Normal guidance is available if the memory area is registered and you drive within the stored area.

What is auto downloaded memory area?

This is the zone around the route in the map area that is automatically stored in the memory when the route is set. When the route distance is 74.5 mi (120 km) or shorter, a zone with a width of approximately 10.9 mi (17.5 km) around the route is stored.

When the route distance is longer than 74.5 mi (120 km), a zone with a width of approximately 6.6 mi (10.6 km) around the route is recorded. This data is transmitted to the memory as you set the route.

The memorized area may be deleted in the following circumstances:

- Yellow lead of the Navigation System or the vehicle battery is disconnected.
 - **RESET** button is pressed.
 - Software is updated.
- In these circumstances, the system will automatically try to recover the deleted information, but data can be recovered only for areas stored on the disc. For items that could not be recovered, a recovery process will begin when you set another disc.

Navigation operation during the memory navi mode

- ✓ :Operation possible
- △ :Operation restricted
- – :Operation not possible

Main menu	
Destination menu	
Address Search	–
Return Home	–
Go to	–
POI Search	–
Vicinity Search	–
Address Book	–
Destination History	–
Freeway Search	–
Telephone Search	–
Cancel Route	✓
Info/Traffic menu	
Traffic On Route	–
Traffic Events	–
Traffic Flow	–
Traffic Settings	✓
XM Status	✓
Stock Info	✓

Main menu	
Browse	✓
My Favorites	✓
Emergency Info	✓
Overlay POI	–
Route Options menu	
Edit Current Route	–
View Current Route	△
Recalculate	–
Number of Routes	✓
Route Condition	✓
Avoid Freeway	✓
Avoid Ferry	✓
Avoid Toll Road	✓
Designate Areas to Avoid	–
Settings menu	
Volume	✓
System Options	△
Short-Cut Selection	✓
Map Display Options	✓
Defined Locations	–
Demo Mode	–
Time	✓
Modify Current Location	✓
Hardware Info	△*
Restore Factory Settings	✓
Shortcut menu	
: Destination	–
: Registration	✓
: Vicinity Search	–
: Whole Route Overview	–
: Overlay POI	–
: Address Book	–
: Route Options	–
: Edit Current Route	–
: Traffic On Route	–
: Stock Info	✓
: Browse	✓
: My Favorites	✓

*: Product Number in the **Service Info Screen** is not displayed.

About the icon for the memory navi mode

When new route guidance starts, the route data from the map disc is read into the memory of the navigation unit. The status of the memory navi

mode is indicated by the following icons on the lower right of the map screen.

(Green flashes): Reading the data

(Green is lit): Operated in memory navi mode

(Red is lit): Operated in memory navi mode, but the distance for guidance is 12.5 mi or less.

- Where the distance for navigation guidance is unknown, the icon flashes red. In that case, the guidance may suddenly fail. It is therefore recommended to reinsert the map disc.

When disappears, memory navi mode is ready. You can now remove the map disc and use the memory navi mode function.

- If you want to remove the map disc while preparing for the memory navi mode, press the **EJECT** button more than 2 seconds. When the map disc is removed, data cannot be read and preparation for memory navi mode will accordingly be canceled. (Since the reading of the map data used in the memory navi mode is not complete, the map scale may switch to a larger scale. In this case, route guidance will continue up to the location already memorized.)

In memory navi mode, you will be notified in three cases: when the distance to the edge of the memorized area is 12 mi (20 km), 6 mi (10 km) and 3 mi (5 km) respectively.

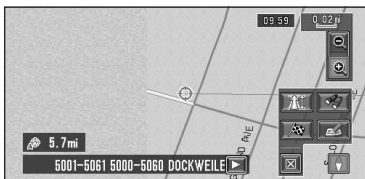
Preparation for memory navi mode will have to be repeated if the vehicle enters an unrecorded area, then returns to an area stored in the disc. (Preparation for the memory navi mode starts from the location where the vehicle re-entered the area stored on the disc.)

Major difference between the memory navi mode and the DVD navi mode

- Free zooming of scale is not available.
- Detailed city map cannot be displayed.
- If a route was set to your destination in memory navi mode, inserting the map disc automatically starts recalculation of another route. (You cannot cancel this reroute operation. If the route calculation fails for some reason, a message will appear asking you to either recalculate a route (Reroute) or delete the current route (Delete route). In this case, drive for a while before touching either "Reroute" or

"Delete route" to delete the current route, then reset the destination.)

- In some cases, you may not be able to use map display mode during DVD navi mode. If the map display mode is not changed during memory navi mode, when the disc is set next time, the display will return to the map display mode used during the DVD navi mode.
- In memory navi mode, map scale data that cannot be read in the memory cannot be displayed. Accordingly, the edge of the map will appear cut off along the point it was not read into memory. This simply indicates the edge of the map data, and is not a malfunction.



- If you keep driving or scrolling the map to a point where the map can no longer be displayed, the scale automatically switches to a range possible to display. If you would like to continue driving or scrolling the map at the same scale, set the map disc in the navigation unit.
 - You cannot reroute to avoid traffic congestion or closure.
 - If you continue to drive outside the route for a while, you may not be able to perform map matching.
 - If you deviate from the route during memory navi mode, the route has been set will be rerouted, but only to return you to the original route calculated within the memorized area.
 - Although an enlarged map of the intersection will be displayed, no special freeway illustration (illustration of freeway intersections) will be displayed.
 - Voice recognition functions face some limitations compared to DVD navi mode.
- ➔ "Voice Commands" → Page 102
- In memory navi mode, the voice function to inform you of traffic congestion or closure forming on the route does not function.

Cautions relating to auto reroute in memory navi mode



Auto rerouting in memory navi mode is designed to return you to your original route wherever possible.

In memory navi mode, persistently deviating from the route may result in one of the following:

- A clearly circuitous route
- Leaving a toll road and returning to the toll road from where you left it.

In the above case, if the set route seems unsuitable, insert the map disc that records your current position. Setting the map disc to navigation automatically resets the route from your current location to your destination.

TRAFFIC icon during the memory navi mode

- XM NavTraffic-related data for a "Zone" (e.g., Zone 1 contain ID, OR, WA) only can be memorized. Therefore, if  appears on the screen when crossing a zone border, you will need to insert the disc to use the XM NavTraffic function. Touching  allows you to check the locations of the traffic information along the route. However, you cannot perform rerouting.

Operation outside the memorized area

When the vehicle leaves the memorized area, the functions will be limited.

- The auto reroute function does not work.
- You can only display a larger scale map. The map display will automatically change to a 25-mi (or 50-mi) scale.
- The map matching function will not be available. Therefore, the position of your vehicle may be misaligned.
- Only the navigation guidance when arriving to your destination will be available; no other guidance is possible (this includes no display of direction arrows).

To cancel these limitations, reset the map disc to the Navigation System.

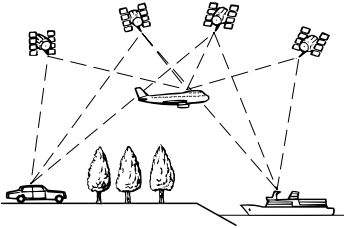
Positioning Technology

The Navigation System accurately measures your current location by combining the positioning by GPS and by Dead Reckoning.

Positioning by GPS

The Global Positioning System (GPS) uses a network of satellites orbiting the Earth. Each of the satellites, which orbit at a height of 68,900,000 feet (21,000 km), continually broadcasts radio signals giving time and position information. This ensures that signals from at least three can be picked up from any open area on the Earth's surface.

The accuracy of the GPS information depends on how good the reception is. When the signals are strong and reception is good, GPS can determine latitude, longitude, and altitude for accurate positioning in three dimensions. But if signal quality is poor, only two dimensions, latitude and longitude, can be obtained and positioning errors are somewhat greater.



Positioning by dead reckoning

The 3D Hybrid Sensor in the main unit also calculates your position. The current location is measured by detecting driving distance with the speed pulse, the turning direction with the Gyrosensor, and inclination of the road with the G sensor.

The 3D Hybrid Sensor can even calculate changes of altitude, and corrects for discrepancies in the distance traveled caused by driving along winding roads or up slopes. Also, the Navigation System learns the driving conditions and stores information in the memory; thus, as you drive more, the precision of the positioning becomes more accurate.

The method of positioning changes as follows depending on whether the speed pulse of your vehicle is detected or not:

3D hybrid mode

This is active when the speed pulse is detected. Inclination of a street can be detected.

Simple hybrid mode

When the speed pulse is not detected, positioning is performed in this mode. Only horizontal movement is detected, so it becomes less accurate. Also, when the positioning by GPS is not available, such as when your vehicle enters a long tunnel, the discrepancy between your actual and calculated position may become bigger.

- The speed pulse data comes from the speed sensing circuit. The location of this speed sensing circuit depends on your vehicle model. In some cases, it is impossible to make a connection to it, and in such a case we recommend that the ND-PG1 speed pulse generator (sold separately) be used.

How do GPS and dead reckoning work together?

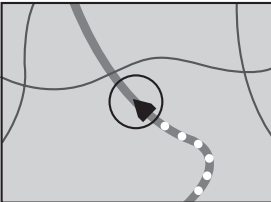
For maximum accuracy, your Navigation System continually compares GPS data with your estimated position as calculated from the data of 3D Hybrid Sensor. However, if only the data from the 3D Hybrid Sensor is available for a long period, positioning errors are gradually compounded until the estimated position becomes unreliable. For this reason, whenever GPS signals are available, they are matched with the data of the 3D Hybrid Sensor and used to correct it for improved accuracy.

To ensure maximum accuracy, the dead reckoning system learns with experience. By comparing the position it estimates with your actual position as obtained using GPS, it can correct for various types of error, such as tire wear and the rolling motion of your vehicle. As you drive, the dead reckoning system gradually gathers more data, learns more, and the accuracy of its estimates gradually increases. So, after you have driven some distance, you can expect your position as shown on the map to show fewer errors.

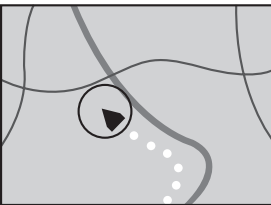
- ❑ If you use chains on your wheels for winter driving or put on the spare wheel, errors may suddenly increase because of difference in wheel diameter. The system detects the fact that the tire diameter has changed, and automatically replaces the value for calculating distance.
- ❑ If the ND-PG1 is used or if your vehicle is operating in Simple hybrid mode, the distance calculation value cannot be replaced automatically.

Map matching

As mentioned, the GPS and dead reckoning systems used by this Navigation System are susceptible to certain errors. Their calculations may, on occasion, place you in a location on the map where no road exists. In this situation, the processing system understands that vehicles travel only on roads, and can correct your position by adjusting it to a nearby road. This is called map matching.



With map matching



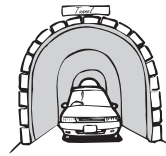
Without map matching

Handling Large Errors

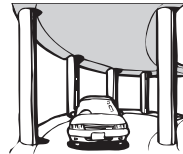
Positioning errors are kept to a minimum by combining GPS, Dead Reckoning, and map matching. However, in some situations, these functions may not work properly, and the error may become bigger.

When the positioning by GPS is impossible

- If signals cannot be received from more than two GPS satellites, GPS positioning does not take place.
- In some driving conditions, signals from GPS satellites may not reach your vehicle. In this case, it is impossible for the system to use GPS positioning.



In tunnels or enclosed parking garages



Under elevated roads or similar



When driving among high buildings



When driving through a dense forest or tall trees

- If a car phone or cellular phone is used near the GPS antenna, GPS reception may be lost temporarily.
 - Do not cover the GPS antenna with spray paint or car wax, because this may block the reception of GPS signals. Snow buildup can also degrade the signals, so keep the antenna clear.
- If, for any reason, GPS signals cannot be received, learning and error correction are not possible. If GPS positioning has been operating for only a short time, your vehicle's actual position and the current location mark on the map may diverge considerably. Once GPS reception is restored, accuracy will be recovered.

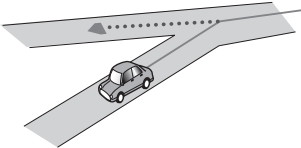
Vehicles that Cannot Obtain Speed Pulse Data

- The speed pulse data comes from the speed sensing circuit. The location of this speed sensing circuit depends on your vehicle model. In some cases, it is impossible to make a connection to it, and in such a case we recommend that the ND-PG1 speed pulse generator (sold separately) be used.

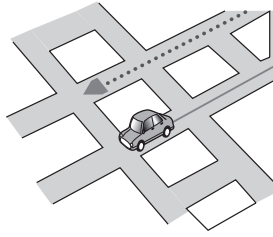
Conditions Likely to Cause Noticeable Positioning Errors

For various reasons such as the state of the road you are traveling on and the state of reception of the GPS signal, the actual position of your vehicle may differ from the position displayed on the map screen.

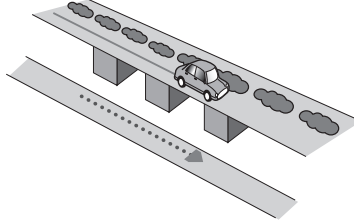
- If you make a shallow turn.



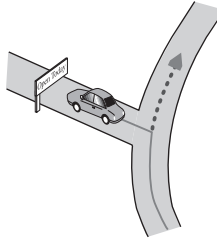
- If there is a parallel road.



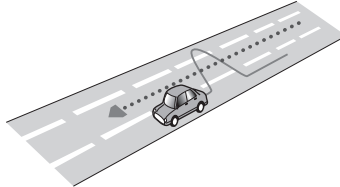
- If there is another road very nearby, such as in the case of an elevated freeway.



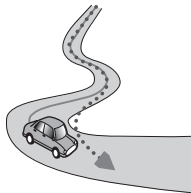
- If you take a recently opened road that is not on the map.



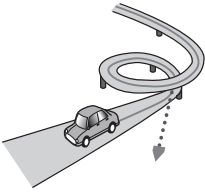
- If you drive in zig-zags.



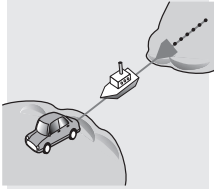
- If the road has connected hairpin bends.



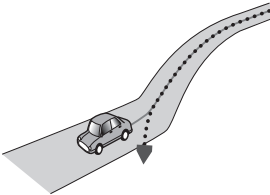
- If there is a loop or similar road configuration.



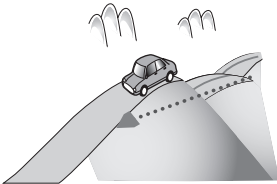
- If you take a ferry.



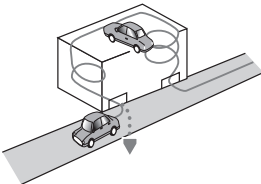
- If you are driving on a long, straight road or a gently curving road.



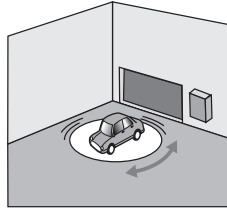
- If you are on a steep mountain road with many height changes.



- If you enter or exit a multi-storey parking lot or similar using a spiral ramp.



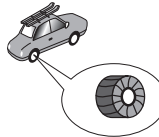
- If your vehicle is turned on a turntable or similar.



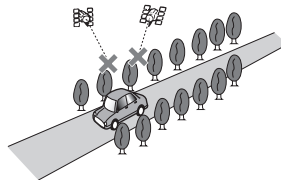
- If your vehicle's wheels spin, such as on a gravel road or in snow.



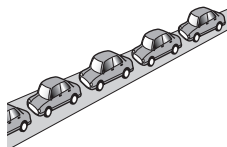
- If you put on chains, or change your tires for some of a different size.



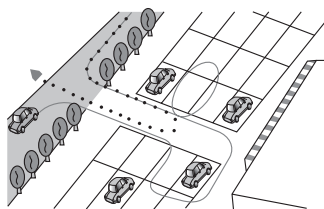
- If trees or other obstacles block the GPS signals for a considerable period.



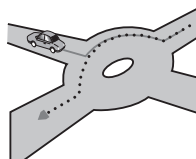
- If you drive very slowly, or in a start-and-stop manner, as in a traffic congestion.



- If you join the road after driving around a large parking lot.



- When you pass around a traffic circle.



- When starting driving immediately after starting the engine.
- If you insert the disc and turn your Navigation System on while driving.

Some types of vehicle may not output a speed signal while driving at just a few kilometers per hour. In such a case, the current location of your vehicle may not be displayed correctly while in a traffic congestion or in a parking lot.

About the Data being Deleted

The information is erased by pushing the **RESET** button or disconnect yellow lead from battery (or remove the battery itself), except for the following items.

- Sensor learning status and driving status
- Memory area memorized manually
- Area to avoid
- Registered Locations
- Data registered in "Emergency Info"

Limitation of Functions for Areas not Stored on the Disc

For areas not stored on the disc (unrecorded areas), the functions will operate as follows:

- ↳ Inoperable buttons for unrecorded areas → Page 26

Displaying the map

- Maps with a scale of between 0.02 mi and 0.25 mi cannot be displayed. (If the scale was set to between 0.02 mi and 0.25 mi, it is automatically switched to 0.5 mi.)
- When driving with **Guide View**, **Route View** or **Driver's View**, upon entering an unrecorded area the display automatically switches to **Map View**. (When the vehicle re-enters an area stored on the disc, the display returns to the previous map mode except for **Driver's View**.)

Destination search

- You cannot search a destination in an unrecorded area using **Address Search**, **POI Search**, or **Telephone Search**. (In case of the POI search, only "City Center" search is possible.)
- If you cannot search in a currently selected zone, the system may forcibly switch to the zone selection screen.
- A **Freeway Search** covers all areas, regardless of the disc on which the information is recorded.
- If a **Vicinity Search** is performed on the border of an unrecorded area, the system will not necessarily select the nearest facility. (The search will take place only within the range of areas recorded on the disc.)

Guidance

- When your vehicle approaches an unrecorded area, you will be notified three times: when the distance to the unrecorded area is 12 mi (20 km), 6 mi (10 km) and 3 mi (5 km) respectively. When your vehicle enters the unrecorded area, a caution is given.
- In the unrecorded area, only guidance for reaching the destination is provided. No other guidance is given.
- If a route calculation is operated within an unrecorded area, the route might not be set from the streets you are currently driving. Also, if you set the destination in an unrecorded

area of the disc, the system may not be able to set the route up to the destination.

- If the vehicle deviates from the set route in an unrecorded area, the Auto Reroute function will not work.
- Even if "**Close-up of Junction**" is "**ON**", the display will not switch to an enlarged map of the intersection.

Route information

- If the set route goes through an unrecorded area, no route profile for the unrecorded area will be displayed. (If the set route traverses both an unrecorded area and area stored on the disc, only the route profile within the recorded area will be displayed.)
- Route scrolling for an unrecorded area is possible only with a map scale of 0.5 mi or above.

Other function limitations

Overlay POI

- **Overlay POI** is not available in an unrecorded area.

Memory mode

- Only data for areas stored on the disc can be memorized. (Data for unrecorded areas cannot be memorized.)

Avoid area


- An area not stored on the disc cannot be set as an Area to Avoid.
- A set Area to Avoid may be deleted when the software is updated. If this happens, the system will automatically try to recover the deleted information, but data can be recovered only for areas stored on the disc. For items that could not be recovered, a recovery process will begin when you set another disc.

Troubleshooting

If you have problems operating your Navigation System, refer to this section. The most common problems are listed below, along with likely causes and solutions. While this list is not comprehensive, it should answer your most common problems. If a solution to your problem cannot be found here, contact your dealer or the nearest authorized Pioneer service facility.

Problems in the navigation screen

Symptom	Cause	Action (See)		
Power doesn't turn on. The unit doesn't operate.	Leads and connectors are incorrectly connected.	Confirm once more that all connections are correct.		
	The fuse is blown.	Rectify the reason for the fuse blowing, then replace the fuse. Be very sure to install the correct fuse with the same rate.		
	Noise and other factors are causing the built-in microprocessor to operate incorrectly.	Press RESET button. (→ "HardWare Manual" and refer to page 114 in this manual.)		
There's no sound. Volume level is low.	The volume level is low. Adjust the volume level.	The attenuator is on. Turn the attenuator off.		
When the ignition switch is turned ON (or turned to ACC), the motor sounds.	This unit confirms whether a disc is loaded or not.	This is a normal operation.		
You cannot position your vehicle on the map or the positioning error is large.	The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. Such a loss of signal quality may happen for the following reasons: <ul style="list-style-type: none"> •The GPS antenna is in an unsuitable location. •Obstacles are blocking signals from the satellites. •The position of satellites relative to your vehicle is bad. •Signals from the GPS satellites have been modified to reduce accuracy. (GPS satellites are operated by the US Department of Defense, and the US government reserves the right to distort positioning data for military reasons. This may lead to greater positioning errors.) •If a vehicle phone or cellular phone is used near the GPS antenna, GPS reception may be lost temporarily. •Do not cover the GPS antenna with spray paint or vehicle wax, because this may block the reception of GPS signals. Snow buildup can also degrade the signals. 	Check the GPS signal reception (→ Page 61) and the position of the GPS antenna if necessary, or continue driving until reception improves. Keep the antenna clear.		
			Signals from the vehicle's speed pulse are not being picked up properly.	Check that the cables are properly connected. If necessary, consult the dealer that installed the system.
			The navigation unit may not be mounted securely in your vehicle.	Check that the navigation unit is securely mounted and, if necessary, consult the dealer that installed the system.

Symptom	Cause	Action (See)
	Your vehicle is operating in Simple hybrid mode.	Connect the speed signal input (pink lead wire) of the power cable correctly, and reset the 3D Hybrid Sensor memory (" Learning Status ").
	The navigation unit is installed with an extreme angle exceeding the limitation of the installation angle.	Confirm the installation angle. (This unit must be installed within +30 degrees to -30 degrees of the horizontal, or within five degrees of your vehicle's direction of travel.)
	Indication of the position of your vehicle is misaligned after a U-turn or reversing.	Check whether or not the reverse gear signal input lead (purple) is connected properly. (The Navigation System works properly without the lead connected, but positioning accuracy will be adversely affected.)
The map continually reorients itself.	The traveling direction is always set to north.	Touch  on the screen and change the map display.
Tracking marks are not displayed.	The " Tracking Display " is turned off.	Check the " Tracking Display " settings (→ Page 66) and make sure " Always " or " This Trip " is selected.
The daylight display is used even when the vehicle lights are on.	Daytime is selected on " Day/Night Display ".	Check the " Day/Night Display " setting (→ Page 66) and make sure " Nighttime " is selected.
	The Orange/white lead is not connected.	Check the connection.
The system will not switch on or will not operate.	Installation or connection has been carried out incorrectly.	Check with your dealer.
The display is very dim.	The vehicle's light is turned ON, and " Nighttime " is selected on " Day/Night Display ".	Read about the " Day/Night Display " setting (→ Page 66) and, if desired, select " Daytime ".
	The vehicle cabin temperature is extremely low.	A Liquid Crystal Display (LCD) is used, and such displays tend to darken when cold. Wait for the vehicle to warm up.
	Picture quality adjustment of the display is not correct.	Refer to "Hardware Manual" to adjust the picture quality.
	Ambient light sensor of the display is hidden.	Set the ambient light sensor not to be hidden.
There is no voice guidance or the volume is low.	The volume setting is low or the speaker lead is disconnected.	Check the volume setting on the display or turn the volume up according to " Volume " (→ Page 63) and/or turn up the volume on the display.
Slope is not displayed on the Vehicle Dynamics screen. Inclination does not move on the 3D Calibration screen.	The speed pulse lead is not connected.	Connect the speed pulse lead.




When the screen is frozen...

Park your vehicle at a safe place, and cut the engine off. Turn the ignition key back to "Acc off". Then start the engine again, and turn the power to the navigation unit back on. If this does not solve the problem, press the **RESET** button on the navigation unit.

Problems in the audio screen (common)

Symptom	Cause	Action (See)
Playback is not possible.	The disc is dirty.	Clean disc. (→ "Hardware Manual")
	The loaded disc is a type this unit cannot play.	Check what type the disc is.
	Non compatible video system disc is loaded.	Change to a disc compatible to your video system.
There's no picture.	The parking brake cord is not connected.	Connect a parking brake cord, and apply the parking brake.
	The parking brake is not applied.	Connect a parking brake cord, and apply the parking brake.
There's audio and video skipping.	This unit is not firmly secured.	Secure this unit firmly.
Rear display picture disappears.	<ul style="list-style-type: none"> The source disc being listened to with the Navigation System has been ejected. The REAR button was pressed and REAR ON mode switched off. There was a problem with the rear display or a faulty wiring connection, for example. Rear View is selected on the screen. When the shift lever is in [R], displays rear view camera images. (When "NAVI" is selected in REAR DISP menu.) 	<ul style="list-style-type: none"> Before ejecting the disc, switch the source. This problem may occur when certain connection methods are used. Press the REAR button to turn REAR ON mode on. Check the rear display and its connection. Select view mode other than Rear View. Move the shift lever other than turn [R] position. (Select SOURCE in REAR DISP menu.)
Nothing is displayed and the touch panel keys cannot use.	The setting for the rear view camera is incorrect. The shift lever was placed in [R] when the rear view camera was not connected.	Connect a rear view camera correctly. Press NAVI/AV button to return to the source display and then select the correct setting for CAMERA . ▷ About CAMERA setting → Page 96

Problems in the audio screen (during DVD-Video playback)

Symptom	Cause	Action (See)
No sounds are heard. The volume level will not rise.	Cables are not connected correctly.	Connect the cables correctly.
	The unit is performing still, slow motion or frame-by-frame playback.	There is no sound during still, slow motion or frame-by-frame playback.
	"dts" is selected for the DVD-Video disc sound track.	Switch to a non "dts" sound track.
The icon  is displayed,  and operation is not possible.	The operation is prohibited for the disc.	This operation is not possible.
	The operation is not compatible with the disc's configuration.	This operation is not possible.
The picture stops (pauses) and the unit cannot be operated.	Reading of data has become impossible during playback.	After touching  once, start playback once more.
The picture is stretched, the aspect is incorrect.	The aspect setting is incorrect for the display.	Select the appropriate setting for your display. (→ "Hardware Manual")
Playback is not possible.	The loaded disc has a different region number from this unit.	Replace the disc with one featuring the same region number as this unit. (→ "Hardware Manual")
A parental lock message is displayed and playback is not possible.	Parental lock is on.	Turn parental lock off or change the level. (→ Page 93)
Parental lock cannot be canceled.	The code number is incorrect.	Input the correct code number. (→ Page 93)
	You have forgotten your code number.	Touch " CLEAR " 10 times to cancel the code number. (→ Page 93)

Symptom	Cause	Action (See)
Dialog language (and subtitle language) cannot be switched.	The DVD playing does not feature multiple language recordings.	You cannot switch among multiple languages if they aren't recorded on the disc.
	You can only switch between items indicated in the disc menu.	Switch using the disc menu.
No subtitles are displayed.	The DVD playing does not feature subtitles.	Subtitles are not displayed if they are not recorded on the disc.
	You can only switch between items indicated in the disc menu.	Switch using the disc menu.
Playback is not with the audio language and subtitle language settings selected in DVD SETUP.	The DVD playing does not feature dialog or subtitles in the language selected in DVD SETUP.	Switching to a selected language is not possible if the language selected in DVD SETUP is not recorded on the disc.
Switching the viewing angle is not possible.	The DVD playing does not feature scenes shot from multiple angles.	You cannot switch between multiple angles if the DVD does not feature scenes recorded from multiple angles.
	You are trying to switch to multiple angle viewing of a scene that is not recorded from multiple angles.	Switch between multiple angles when watching scenes recorded from multiple angles.
The picture is extremely unclear/distorted and dark during playback.	The disc features a signal to prohibit copying. (Some discs may have this.)	Since this unit is compatible with the copy guard analog copy protect system, when playing a disc that has a signal prohibiting copying, the picture may suffer from horizontal stripes or other imperfections when viewed on some displays. This does not mean this unit is malfunctioning.

Messages and how to react to them

The following messages may be displayed by your Navigation System.

- There are occasions when you may see error messages other than those shown here. In such a case, follow the instructions given on the display.

Message	When	What to do
Please insert the appropriate disc.	<ul style="list-style-type: none"> • If you try to use a disc which is incompatible with this system. 	<ul style="list-style-type: none"> • Insert a suitable disc.
This is not the appropriate disc. Please insert the appropriate disc.	<ul style="list-style-type: none"> • If you insert a disc upside down. • If the disc is dirty. • If the disc is cracked or otherwise damaged. 	<ul style="list-style-type: none"> • Insert the disc with the label upward. • Clean the disc. • Insert a normal, round disc.
Irregular speed pulse signal is detected. Please power off the system and check the installation. After you have checked, please re-boot the system and press OK .	If the Navigation unit does not receive the vehicle speed pulse.	Consult your Pioneer dealer.
Speed pulse wire is not connected. System will start to learn without speed pulse. Please keep in mind that accuracy is not fully ensured without speed pulse.	The speed signal input (pink lead wire) of the power cable is not connected.	To operate with 3D hybrid mode, connect the speed signal input (pink lead wire) of the power cable correctly. Although it can be operated with Simple hybrid mode without connecting the speed signal input, the precision of the positioning will be less accurate.
Vibration is detected. Please power off the system and check the installation. After you have checked, please re-boot the system and press OK .	While the vehicle is stationary, the Navigation System is installed in a place where the navigation unit may be affected by a large vibration.	Re-install the navigation unit of the Navigation System in a place where the navigation unit will not be affected by vibration.

Message	When	What to do
Direction of G sensor is not correct. Please power off the system and check the installation. After you have checked, please re-boot the system and press "OK".	Direction of G sensor is set incorrectly.	See the "Installation Manual" and set the direction of the Hide-away unit correctly.
Gyro Sensor is not working properly. Please consult your dealer or Pioneer service center.	Abnormal output of Gyrosensor is detected.	Note down the error code shown on the screen; turn off the power, and then contact your nearest Pioneer service facility.
This function is not available now.	The screen cannot be displayed with Vehicle Dynamics Display. Because the sensor has not been taught so the sensor information cannot be acquired.	If the sensor learning status reaches the Sensor Initializing status or more, the system is ready to be used.
System detected that the vertical angle of the installation has been changed. Learning status for Gyro Sensor has been initialized.	If the mounting angle of the Hide-away unit has been changed.	The system initializes the sensor in order to operate it with the maximum performance and automatically starts re-learning.
System detected that the vertical angle of the installation exceeds the permission level. Please install the navigation unit correctly.	The navigation unit is installed with an extreme angle exceeding the limitation of the installation angle.	Confirm the installation angle. (The Navigation System must be installed within +30 degrees to -30 degrees of the horizontal, or within five degrees of your vehicle's direction of travel.)
No data available at this time.	If no data is available that can be used with the XM tuner.	Wait for a while and try the operation again.
No XM signal. Please wait.	While waiting for a response from the XM tuner.	Wait for a while and try the operation again.
Route calculation was not possible.	Route calculation has failed because of malfunction of map data, software, hardware, or disc.	<ul style="list-style-type: none"> • Change the destination. • Clean the disc. • Consult the Pioneer Local dealer if this message persists.
Route calculation was not possible because the destination is too far.	The destination is too far.	<ul style="list-style-type: none"> • Set a destination closer to the starting point. • Set one or more way points.
Route calculation was not possible because the destination is too near.	The destination or way point(s) is too close.	Set a destination [and way point(s)] farther from the starting point.
Route calculation was not possible due to traffic regulations.	<ul style="list-style-type: none"> • The destination or way point(s) are in a Control Traffic Zone (CTR) and the route calculation is hampered. • Your vehicle is currently in a Control Traffic Zone (CTR) and the route calculation is hampered. 	<ul style="list-style-type: none"> • Set a destination and way point(s) outside the CTR if you know where the restricted area is. • Try the destination or way point(s) away from the currently set points to some extent. • Drive your vehicle to an unrestricted area and reset the destination and way point(s).
Route calculation was not possible because no guidance can be provided around the destination or the starting point.	The destination, way point(s), or starting point are in an area where no road exists (e.g. a mountain) and the route calculation is impossible.	<ul style="list-style-type: none"> • Set a destination and way point(s) on roads. • Reset the destination after you drive the vehicle to any road.
There is no route to the destination.	The destination or way point(s) are in an isolated island, etc. without a ferry and the route calculation is impossible.	Change the destination.
The route could not avoid the specified area.	If route setting cannot avoid specified Areas to Avoid.	If the current route is not desired, set destination or way points that do not pass through the Areas to Avoid.
The route could not avoid the specified area. Toll road has not been avoided.	If the route to the destination (or way point) cannot be established by bypassing toll roads (including toll areas) and Areas to Avoid.	If the current route is not desired, set destination or way points that do not pass through toll roads (including toll areas) and Areas to Avoid.

Message	When	What to do
Ferry has not been avoided.	In case a ferry route was included in the route to the destination or way points even though " Avoid Ferry " was set to ON .	If the current route is not desired, set destination or way points that do not pass through a ferry route.
Toll road has not been avoided.	If the route to the destination (or way point) cannot be established by bypassing toll roads (including toll areas).	If the current route is not desired, set destination or way points that do not pass through toll roads (including toll areas).
The address does not exist. Do you want to continue?	If the house number is entered without specifying City or Street and that house number does not exist on the data.	Re-enter the existing house number by following the instructions shown on the screen. Or, proceed to the next step without entering the house number and specify the City or Street first.
There is no applicable data for the selected city. Automatically returning to list.	If the history data of the City could not be used (for example, in case that the history data of the City that was used in the POI Search cannot be found in the Address Search .)	Once the search is performed to specify the City, the result is saved as a history. The data of the specified City, however, may not be hit by the different search criteria. In this case, try another search method or change the destination.
There is no Freeway in this area.	If no freeway was found in the selected Zone.	Set the destination or way points using another search method or change the location of the destination or way points.
This area does not contain any POI's of the selected type.	POI Search cannot be performed because the searched location is in areas not stored on the map disc (unrecorded areas). Facilities of the selected category do not exist in the surrounding areas.	<ul style="list-style-type: none"> • Replace the map disc and perform the POI Search again. • Use another search method or move to another location and perform the POI Search again.
Only City Center can be searched.	If POI Search was performed on areas not stored on the map disc (unrecorded areas).	Only the City Center can be searched. If you want to search other categories in unrecorded areas, replace the map disc and perform the POI Search again. Set the "areas stored on the map disc" to destination or way points.
This zone is not available on this disc. Please insert appropriate disc.	When areas not stored on the map disc (unrecorded areas) are included in the search.	Set the destination or way points in the areas stored on the map disc, or replace the map disc and perform the search again.
Failed to make the route profile.	Failed to generate the route profile because the set route passes through areas not stored on the map disc (unrecorded areas).	Insert the map disc and retry.
The maximum number of registrations has been completed. Please clear existing registered items and re-register current item.	If there are already 300 items when you attempt to register an item in the Address Book.	Delete unnecessary data and try to register again.
Memory is full.	When the total 300 registered points are in the CD-R and Address Book , you attempt moving an item to the Address Book from CD-R.	Delete unnecessary data on the system and try to register again or reduce currently selected items.
Too many records are selected. Please indicate what records that you would like to remove from the memory.	When the total 98 registered points for using voice recognition are in the CD-R and Address Book , you attempt moving an item to the Address Book from CD-R.	Delete some resisted items as appropriate or reduce currently selected items.

Message	When	What to do
Too many records are selected. Please indicate what records that you would like to remove from the memory.	If the number of registered records of the voice recognition reaches or exceeds 98.	Delete some resisted items as appropriate.
You can select up to 98 records with voice recognition.	If the number of registered records of the voice recognition reaches or exceeds 98.	Reduce currently selected items.
Irregular character strings. Please input again.	A symbol that cannot be pronounced was entered.	Enter a word that can be pronounced.
There is no /BG/ folder. Please create /BG/ folder and store JPEG files in that Folder.	Cannot load the image because the BG folder is not found in the inserted disc.	Use the appropriate data after reading "Changing Background Picture" on page 59.
There is no Disc. Please insert a Disc with JPEG files stored in the /BG/ folder.	The disc in which the background picture is stored is not correctly inserted.	Insert the disc that contains the background pictures.
Data read error. Change is canceled.	Failed to read the data because the CD-R is damaged or dirty. Or, the pick-up lens of the DVD drive is dirty.	Try re-reading the data by inserting a clean CD-R. Clean the pick-up lens with a commercially available cleaning kit for DVD, then try to reading again.
JPEG file is corrupt. Change is cancelled.	The data is damaged or an attempt was made to set a JPEG image, that is out of specifications, as the background picture.	Use the appropriate data after reading "Changing Background Picture" on page 59.
Data Read error. Back to Original Background. Please do not turn power off.	Failed to read the data because the CD-R is damaged or dirty. Or, the pick-up lens of the DVD drive is dirty.	Try re-reading the data by inserting a clean CD-R. Clean the pick-up lens with a commercially available cleaning kit for DVD, then try to reading again.
There are no files available in /BG/ folder.	If the BG folder exists on the PC card but no data in JPEG format exists. If the BG folder exists on the CD-R but no data in JPEG format exists.	Use the appropriate data after reading "Changing Background Picture" on page 59.
Please insert the appropriate disc. Route calculation was not possible.	In the memory navi mode, if the Auto-reroute does not function for some reason.	Insert the map disc.
No route data can be stored. You should insert the disc that contains the map data of the current position.	In case the area to be set for "Map In Memory" is "areas not stored on the map disc (unrecorded areas)".	<ul style="list-style-type: none"> •Change the memory area to be set to the "areas stored on the map disc". •Insert the map disc containing that area.
<ul style="list-style-type: none"> •Scaling down. •Scaling up. 	In the memory navi mode, if the map disc is inserted without changing the scale (only when the point is stored on the map disc).	The scale automatically returns to the one that was set in the DVD navi mode before being changed to the memory navi mode.

Message	When	What to do
<ul style="list-style-type: none"> •No map data available on this scale. Scaling up. •No map data available on this scale. Scaling down. 	<p>When the scale that had been previously displayed cannot be displayed for the following reasons:</p> <ul style="list-style-type: none"> •The disc was ejected and the system was changed to the memory navi mode. •In the memory navi mode, the map was scrolled to outside the memory area. Or the vehicle moved outside of the memory area. •The map was scrolled to areas not stored on the map disc (unrecorded areas). Or the vehicle moved to unrecorded areas. •The map was scrolled from unrecorded areas to the memory area. Or, the vehicle moved from unrecorded areas to the memory area. 	<p>If the desired scale cannot be selected, insert the map disc that contains that area and then change the scale.</p>
<p>Failure in the memory recovery process. Memory navigation is presently not possible.</p>	<p>Failed to complete the recovery of the memory area because the disc could not be read for some reason, resulting in deletion of the memory.</p>	<ul style="list-style-type: none"> •Clean the disc. •Clean the DVD drive. •Consult the Pioneer Local dealer if this message persists.
<p>The map data could not be stored. Previous setting will be kept.</p>	<p>In case recovery was performed for the memory area after failing to read the disc data for some reason (The memory area that was previously set will be recovered).</p>	<ul style="list-style-type: none"> •Clean the disc. •Clean the DVD drive. •Consult the Pioneer Local dealer if this message persists.
<p>This function is not available with the current map disc.</p>	<p>In case the current position is "areas not stored on the map disc (unrecorded areas)" and an attempt was made to zoom in to make the scale 0.5 mile or more.</p>	<p>Zoom in again after the vehicle moves into an area stored on the map disc. Or, replace the map disc and try to zoom in again.</p>
<p>Failed to save to memory. Please re-enter setting.</p>	<p>In case the settings could not be saved for some reason.</p>	<ul style="list-style-type: none"> •Retry. •Consult the Pioneer Local dealer if this message persists.
<p>Caution ! System detected improper connection of Parking Brake lead. Please check your configuration for safety. Please see Operation Manual for more information regarding safe operation.</p>	<ul style="list-style-type: none"> •Parking brake lead is incorrectly connected. •For a certain period after the installation of your Navigation System. 	<ul style="list-style-type: none"> •Confirm once more that their connections are correct. •Drive your vehicle for a while until the sensor learning status "Initializing" is turned to "Simple Hybrid" or "3D Hybrid".

Error Messages

When problems occur with disc playback, an error message appears on the display. Refer to the table below to identify the problem, then take the suggested corrective action. If the error persists, contact your dealer or your nearest PIONEER Service Center. The messages in "()" will appear on the sub-display.

Message	Cause	Action (See)
Error-02 (ERROR-20, ERROR-21, ERROR-22)	Dirty	Clean disc.
	Scatched disc	Replace disc.
	The disc is loaded upside down	Check that the disc is loaded correctly.
Error-05-82 (ERROR-50)	Electrical or mechanical	Press RESET button. ("Hardware manual" and refer to page 114 in this manual.)
DIFFERENT REGION DISC (REGION ERR)	The disc does not have the same region number as this unit	Replace the DVD-Video with one bearing the correct region number.
NON PLAYABLE DISC (NON-PLAY)	This type of disc cannot be played by this unit	Replace the disc with one this unit can play.
THERMAL PROTECTION IN MOTION (TEMP)	The temperature of this unit is outside of the normal operating range	Wait until the unit's temperature returns to within normal operating limits.

Route Setting Information

Route search specifications

Your Navigation System sets a route to your destination by applying certain built-in rules to the map data. This section provides some useful information about how a route is set.

CAUTION

- **When a route is calculated, the route and voice guidance for the route is automatically set. Also, for day or time traffic regulations, only information about traffic regulations at the time when the route was calculated is shown. One-way streets and street closures may not be taken into consideration. For example, if a street is open during the morning only, but you arrive later, it would be against the traffic regulations so you cannot drive along the set route. When driving, please follow the actual traffic signs. Also, the system may not know some traffic regulations.**
- **Upgrade Navigation DVDs are available for purchase from your local Pioneer dealer that includes the most current map and point of interest information. Contact your local Pioneer dealer for details.**

About the route condition

When the calculation of only one route is set, you can search a route option by combining the following conditions.

- ⇒ How to set the calculation conditions → Page 38

For example, when "**Fast**" and "**Avoid Freeway**" ("**On**") are combined, the route, which avoids freeway, and has the shortest travel time, will be calculated and displayed on the screen.

Condition 1 :whether to put priority on the distance, or time

Short :

Calculate a route with the shortest distance to your destination as a priority.

Fast :

Calculate a route with the shortest travel time to your destination as a priority.

Condition 2 :whether to use freeway or not

Avoid Freeway :

Calculate a route that avoids freeway. (A route using the freeway may be set if your destination is far away.)

- The system assumes the driver deviated either intentionally or inadvertently from the route and searches for another route (intelligent rerouting). Depending on the situation, the system may search a new route that does not return to the original one.
 - The calculated route is one example of the route to your destination decided by the Navigation System whilst taking the type of streets or traffic regulations into account. It is not necessarily an optimum route. (In some cases, you may not be able to set the streets you want to pass. If you want to pass a certain street, set the way point on that street.)
 - The route set by your Navigation System is based on the assumption that the driver does not know the area. Thus, the streets known to local drivers, such as small streets or special roads, may not be used for the set route.
 - Some route options may become the same route. If visiting points are set, or the route is set by voice operation, only one route is calculated.
 - Route setting is limited to the range of the disc in use.
 - The destination is too far, there may be instances where the route cannot be set. (If you want to set a long-distance route going across several areas, set way points along the way.)
 - During voice guidance, turns and intersections from the freeway are announced. However, if you pass intersections, turns, and other guide points in rapid succession, some may not be announced.
 - It is possible that guidance may direct you off a freeway and then back on again.
 - In some cases, the set route may require you to travel in the opposite direction to your current heading. In such cases, you are instructed to turn around, so please turn around safely by following the actual traffic rules.
 - In some cases, guidance may direct you past your destination and then indicate a U-turn to get back to it.
 - In some cases, a route may begin on the opposite side of a railway or river from your actual current location. If this happens, drive towards your destination for a while, and try route calculation again.
 - In the following cases, the route that passes through an Area to Avoid may be set:
 - when your destination or way points are in the Area to Avoid
 - when it is not possible to avoid doing so
 - If a suitable route cannot be set in compliance with the specified "Detour" distance, or your preference to avoid freeways, toll roads, ferry route, the setting or parameter may be ignored.
 - When there is a traffic congestion or closure ahead, if driving through the traffic congestion or closure is better than taking the detour, a detour route may not be set.
 - There may be instances when the starting point and the destination point are not on the highlighted route.
 - The number of traffic circle exits displayed on the screen may differ from the actual number of roads.
- ### Auto Reroute
- Auto Reroute is used when you deviate more than 0.01 mi (30m) from the route.
 - Auto Reroute function does not work in the following cases:
 - when your vehicle is not on a street
 - when you are too close to your destination
 - when your vehicle is on a ferry
 - when driving on a road inside a facility
 - when driving on a traffic circle
 - when your vehicle is out of Memory area
 - when the vehicle goes out of the area stored in the disc during DVD navigation mode
 - when the vehicle goes out of the memorized area during memory navi mode
- ### Route highlighting
- Once set, the route is highlighted in bright green or light blue on the map.
 - The immediate vicinity of your starting point and destination may not be highlighted, and neither will areas with particularly complex road layouts. Consequently, the route may appear to be cut off on the display, but voice guidance will continue.
- ### Roads not used in calculations
- Even though displayed onscreen, the following roads are not included in route calculations.
- Stubble Road
 - Walk Way
 - Public vehicle only

Intersection enlargement

- When “**Close-up of Junction**” is on, the map scale increases to show more detail as you approach an intersection.
- If the intersection is approached in a gentle curve, the map displayed may differ from the actual road layout.

Tracking

- Your Navigation System marks your course on the map in certain increments. This is called tracking. It is handy when you want to check a route traveled without guidance or if returning along a complex route.
 - A maximum of about 145 miles (230 km) is marked and, as you travel beyond this limit, tracking marks are erased in order from the most distant. Tracking display shows about 100 miles tracking of your vehicle with white dots.
- ⇒ Tracking can also be set for automatic erasing whenever the Navigation System is switched off → Page 66



Types of the Road Stored in the Disc

There are three types of roads in the map of this disc.

Roads included in the route guidance and roads not included

Turn by Turn Routable Roads contain full attribute data and can be used for full Route Guidance. Pioneer Navigation will display full route guidance, including turn-by-turn voice directions and arrow icons.

Routable roads (The route displayed and highlighted in purple color) have only basic data and can only be used to plot a navigable route. Pioneer Navigation will only display a navigable route on the map (only the arrival guidance for the destination or a way point is available). Please review and obey all local traffic rules along the highlighted route. (For your safety.) No turn-by-turn directions or arrow icons will be displayed on these roads.

When your vehicle reaches to the entrance of this road, the icon  will be displayed, indicating that the guidance is not available with this type of road. The icon  will be indicated for the road with which the guidance is available.

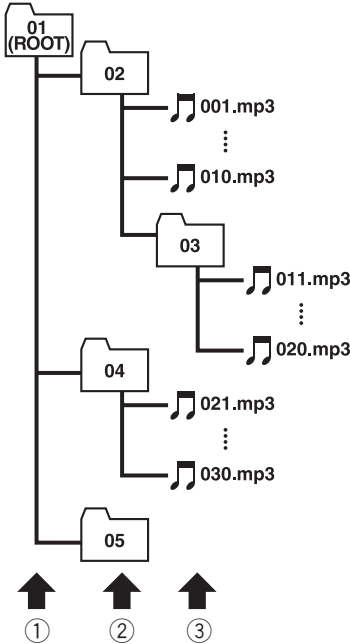
The Close-up of intersection function, Auto Reroute function, Changing the view to Guide View, or Route View are not available.

Non routable roads (pink color road)

Map display is possible, but it cannot be used for the route calculation. Please review and obey all local traffic rules along this route. (For your safety.)

About folders and MP3 files

- An outline of a CD-ROM with MP3 files on it is shown below. Subfolders are shown as folders in the folder currently selected.



- ① **First level**
- ② **Second level**
- ③ **Third level**

Notes:

- This unit assigns folder numbers. The user can not assign folder numbers.
- If you are using a folder that does not contain an MP3 file, the folder itself will display but you will not be able to see any files in the folder.
- MP3 files in up to 8 tiers of folders can be played back. However, there is a delay in the start of playback on discs with numerous tiers. For this reason we recommend creating discs with no more than 2 tiers.
- It is possible to play back up to 253 items from folder on one disc.

Glossary

This glossary explains some of the terms used in the manual.

3D Hybrid sensor

The built-in sensor which enables the system to estimate your vehicle's position. A learning function increases its accuracy and its learning data can be stored in memory.

Address Book

A list of previously searched destinations, way points and locations registered manually.

Aspect ratio

This is the width-to-height ratio of a TV screen. A regular display has an aspect ratio of 4:3. Wide screen displays have an aspect ratio of 16:9, providing a bigger picture for exceptional presence and atmosphere.

Bit rate

This expresses data volume per second, or bps units (bits per second). The higher the rate, the more information is available to reproduce the sound. Using the same encoding method (such as MP3), the higher the rate, the better the sound.

Chapter

DVD titles are in turn divided into chapters which are numbered in the same way as the chapters of a book. With DVD-Video discs featuring chapters, you can quickly find a desired scene with chapter search.

Current location

The present location of your vehicle; your current location is shown on the map by a red triangle mark.

Default setting

A factory setting which applies when you first switch on the system; you can change default settings to suit your own needs in the Route Options menu or the Settings menu.

Destination

A location you choose as the end point of your journey.

Dolby Digital

Dolby Digital provides multi-channel audio from up to 5.1 independent channels. This is the same as the Dolby Digital surround sound system used in theaters.



DTS

This stands for Digital Theater Systems. DTS is a surround system delivering multi-channel audio from up to 6 independent channels.

**Favorite location**

A frequently visited location (such as your workplace or a relative's home) that you can register to allow easy routing.

GPS

Global Positioning System. A network of satellites that provides navigation signals for a variety of purposes.

Guidance mode

The mode in which guidance is given as you drive to your destination; the system automatically switches to this mode as soon as a route has been set.

Guidance point

These are important landmarks along your route, generally intersections. The next way point along your route is indicated on the map by the yellow flag icon.

Home location

Your registered home location.

ID3 tag

This is a method of embedding track-related information in a MP3 file. This embedded information can include the track title, the artist's name, the album title, the music genre, the year of production, comments and other data. The contents can be freely edited using software with ID3 Tag editing functions. Although the tags are restricted to the number of characters, the information can be viewed when the track is played back.

ISO9660 format

This is the international standard for the format logic of CD-ROM folders and files. For the ISO9660 format, there are regulations for the following two levels.

Level 1:

The file name is in 8.3 format (the name consists of up to 8 characters, half-byte English capital letters and half-byte numerals and the "_" sign, with a file-extension of three characters.)

Level 2:

The file name can have up to 31 characters (including the separation mark ".") and a file extension). Each folder contains less than 8 hierarchies.

Extended formats

Joliet:

File names can have up to 64 characters.

Romeo:

File names can have up to 128 characters.

Linear PCM (LPCM)/Pulse code modulation

This stands for linear pulse code modulation, which is the signal recording system used for music CDs and DVDs. Generally, DVDs are recorded with higher sampling frequency and bit rate than CDs. Therefore, DVDs can provide higher sound quality.

m3u

Playlists created using the "WINAMP" software have a playlist file extension (.m3u).

Menu

A list of options shown on the display; choices are selected touching the display.

MP3

MP3 is short for MPEG Audio Layer 3. It is an audio compression standard set by a working group (MPEG) of the ISO (International Standards Organization). MP3 is able to compress audio data to about 1/10th the level of a conventional disc.

MPEG

This stands for Moving Pictures Experts Group, and is an international video image compression standard. Some DVDs feature digital audio compressed and recorded using this system.

Multi-angle

With regular TV programs, although multiple cameras are used to simultaneously shoot scenes, only images from one camera at a time are transmitted to your TV. Some DVDs feature scenes shot from multiple angles, letting you choose your viewing angle as desired.

Multi-audio (Multilingual dialog)

Some DVDs feature dialog recorded in multiple languages. Dialog in up to 8 languages can be recorded on a single disc, letting you choose as desired.

Multi-session

Multi-session is a recording method that allows additional data to be recorded later. When recording data on a CD-ROM, CD-R or CD-RW, etc., all data from beginning to end is treated as a single unit or session. Multi-session is a method of recording more than 2 sessions in one disc.

Multi-subtitle

Subtitles in up to 32 languages can be recorded on a single DVD, letting you choose as desired.

Navigation map disc

This DVD-ROM disc contains Pioneer navigation software. Map data is also recorded on the disc.

Optical digital output

By transmitting audio signals in a digital signal format, the chance of sonic quality deteriorating in the course of transmission is minimized. An optical digital output is designed to transmit digital signals optically.

Packet write

This is a general term for a method of writing on CD-R, etc. at the time required for a file, just as is done with files on floppy or hard discs.

Parental lock

Some DVD-Video discs with violent or adult-oriented scenes feature parental lock which prevents children from viewing such scenes. With this kind of disc, if you set the unit's parental lock level, playback of scenes inappropriate for children will be disabled, or these scenes will be skipped.

Point of Interest (POI)

Point Of Interest; any of a range of locations stored in the data, such as railway stations, shops, restaurants, and amusement parks.

Region number

DVD players and DVD discs feature region numbers indicating the area in which they were purchased. Playback of a DVD is not possible unless it features the same region number as the DVD player. The navigation unit's region number is displayed on the bottom of the display unit.

Route setting

The process of determining the ideal route to a specific location; route setting is done automatically by the system when you specify a destination.

Set route

The route marked out by the system to your destination. It is highlighted in bright green on the map.

Title

DVD-Video discs have high data capacity, enabling recording of multiple movies on a single disc. If, for example, one disc contains three separate movies, they are divided into title 1, title 2 and title 3. This lets you enjoy the convenience of title search and other functions.

Tracking

Marks on the map indicating the route you have traveled.

VBR

VBR is short for variable bit rate. Generally speaking CBR (constant bit rate) is more widely used. But by flexibly adjusting the bit rate according to the needs of audio compression, it is possible to achieve compression priority sound quality.

Voice guidance

The giving of directions by a recorded voice while in guidance mode.

Voice recognition

The technology that allows the system to understand the driver's voice commands.

- In order to operate the navigation unit by voice, you need the microphone kit (CD-VC1), which is sold separately. Please refer to the "Owner's Manual" for the microphone kit.

Way Point

A location that you choose to visit before your destination; a journey can be built up from multiple way points and the destination.

Main menu

Destination

- Address Search ▶ P. 20
- Return Home ▶ P. 38, 45
- Go to ▶ P. 38, 45
- POI Search ▶ P. 35
- Vicinity Search ▶ P. 36
- Address Book ▶ P. 38, 46
- Destination History ▶ P. 38, 46
- Freeway Search ▶ P. 37
- Telephone Search ▶ P. 38
- Cancel Route ▶ P. 42

Info/Traffic

- Traffic On Route ▶ P. 51
- Traffic Events ▶ P. 50
- Traffic Flow ▶ P. 52
- Traffic Settings ▶ P. 53
- XM Status ▶ P. 54
- Stock Info ▶ P. 57
- Browse ▶ P. 58
- My Favorites ▶ P. 58
- Emergency Info ▶ P. 54
- Overlay POI ▶ P. 36

Route Options

- Edit Current Route** ▶ P. 39
- View Current Route** ▶ P. 41
- Recalculate** ▶ P. 39
- Number of Routes** ▶ P. 39
- Route Condition** ▶ P. 39
- Avoid Freeway** ▶ P. 39
- Avoid Ferry** ▶ P. 39
- Avoid Toll Road** ▶ P. 39
- Designate Areas to Avoid** ▶ P. 49

Settings

Volume ▶ P. 63

System Options

Short-Cut Selection

Map Display Options

Defined Locations

Demo Mode ▶ P. 67

Time ▶ P. 67

Modify Current Location ▶ P. 67

Hardware Info

Restore Factory Settings ▶ P. 67

Language Selection ▶ P. 64

KM/Mile Setting ▶ P. 64

Voice Recog. Help ▶ P. 64

Auto Voice Recognition ▶ P. 64

Average Speed ▶ P. 64

Background Picture Setting ▶ P. 65

Read From Disc ▶ P. 48

Shortcut menu ▶ P. 133

Tracking Display ▶ P. 66

AV Guide Mode ▶ P. 66

Day/Night Display ▶ P. 66

Close-up of Junction ▶ P. 66

Arrow in AV ▶ P. 66

Set "Home" ▶ P. 66

Map In Memory ▶ P. 66

Set "Go To" ▶ P. 67


Connection Status ▶ P. 61


3D Calibration ▶ P. 60


Service Info Screen ▶ P. 67

Shortcut menu


Shortcut menu


 **Chg.Route** ▶ P. 28


 **Registration** ▶ P. 46

 **Vicinity Search** ▶ P. 37

 **Whole Route Overview** ▶ P. 65

 **:Overlay POI** ▶ P. 37


 **:Address Book** ▶ P. 46


 **:Route Options** ▶ P. 131

Route Options ▶ P. 131

 **:Edit Current Route** ▶ P. 39

 **:Traffic On Route** ▶ P. 51

 **:Stock Info** ▶ P. 57

 **:Browse** ▶ P. 58

 **:My Favorites** ▶ P. 58

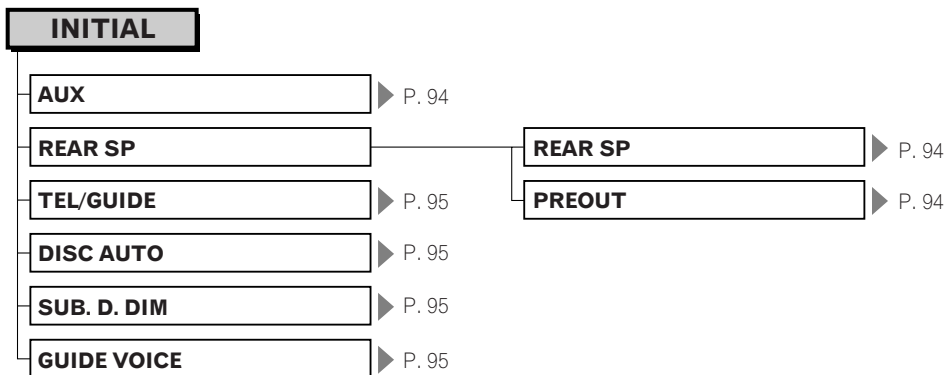
Menu in the audio screen

AUDIO menu

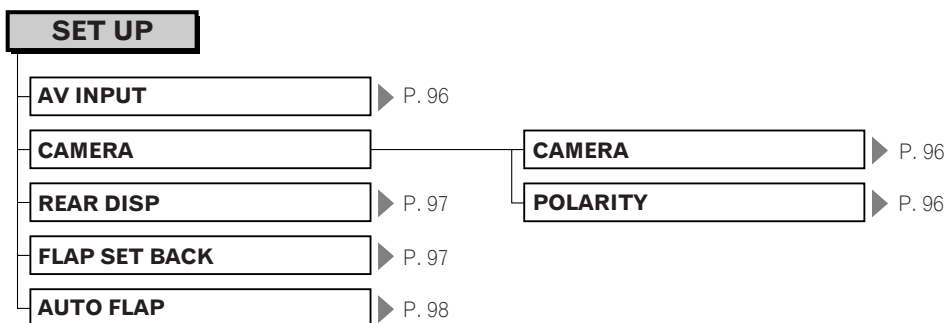
AUDIO

- FAD/BAL (BALANCE) ▶ P. 89
- EQ MENU ▶ P. 90
- BASS ▶ P. 90
- TREBLE ▶ P. 90
- LOUDNESS ▶ P. 91
- SUB WOOFER (NON FADING) ▶ P. 91, 91
- HPF ▶ P. 91
- SLA ▶ P. 92
- EQ-EX ▶ P. 92

INITIAL menu



SET UP menu



FUNCTION menu**DISC [DVD-Video, CD, MP3]****FUNCTION**

REPEAT ▶ P. 74

RANDOM ▶ P. 74

SCAN ▶ P. 74

PAUSE ▶ P. 74

S-DVD (M-DVD)**FUNCTION**

REPEAT ▶ P. 86

RANDOM ▶ P. 86

SCAN ▶ P. 86

PAUSE ▶ P. 86

ITS PLAY ▶ P. 81

ITS MEMORY ▶ P. 80

M-CD**FUNCTION**

REPEAT ▶ P. 80

RANDOM ▶ P. 80

SCAN ▶ P. 80

TRACK LIST ▶ P. 82

PAUSE ▶ P. 80

COMP ▶ P. 82

ITS PLAY ▶ P. 81

ITS MEMORY ▶ P. 80

RADIO**FUNCTION**

BSM ▶ P. 78

LOCAL ▶ P. 78

TV**FUNCTION**

BSSM ▶ P. 85

DVD SETUP menu**DVD SETUP** ▶ P. 92

LANGUAGE ▶ P. 93

A SUB TITLE ▶ P. 93

M. ANGLE ▶ P. 93

TV ASPECT ▶ P. 93

PARENTAL ▶ P. 93

SUB. T LANGUAGE ▶ P. 92

AUDIO LANGUAGE ▶ P. 92

MENU LANGUAGE ▶ P. 92

Register your product at

<http://www.pioneerelectronics.com>

See "Product registration" page

PIONEER CORPORATION

4-1, MEGURO 1-CHOME, MEGURO-KU, TOKYO 153-8654, JAPAN

PIONEER ELECTRONICS (USA) INC.

P.O. Box 1540, Long Beach, California 90801-1540, U.S.A.

TEL: (800) 421-1404

PIONEER EUROPE NV

Haven 1087, Keetberglaan 1, B-9120 Melsele, Belgium

TEL: (0) 3/570.05.11

PIONEER ELECTRONICS ASIACENTRE PTE. LTD.

253 Alexandra Road, #04-01, Singapore 159936

TEL: 65-6472-7555

PIONEER ELECTRONICS AUSTRALIA PTY. LTD.

178-184 Boundary Road, Braeside, Victoria 3195, Australia

TEL: (03) 9586-6300

PIONEER ELECTRONICS OF CANADA, INC.

300 Allstate Parkway, Markham, Ontario L3R OP2, Canada

TEL: 1-877-283-5901

PIONEER ELECTRONICS DE MEXICO, S.A. de C.V.

Blvd.Manuel Avila Camacho 138 10 piso

Col.Lomas de Chapultepec, Mexico, D.F. 11000

TEL:55-9178-4270

先鋒股份有限公司

總公司: 台北市中山北路二段44號13樓

電話: (02) 2521-3588

先鋒電子(香港)有限公司

香港九龍尖沙咀海港城世界商業中心9樓901-6室

電話: (0852) 2848-6488

Published by Pioneer Corporation.
Copyright © 2004 by Pioneer Corporation.
All rights reserved.

Printed in China

<CRB2026-A/U> UC

<KYGHX> <04L00001>